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Abstract. Nomenclatural and taxonomic changes are proposed for American Apomecynini (Coleoptera: Cerambycidae: Lamiinae). **New synonymies:** *Parmenonta valida* Thomson, 1868, type species of *Parmenonta* Thomson, 1868, is transferred to Adetus LeConte, 1852, making obligatory the synonymy of *Parmenonta* with *Adetus*; *Adetus cylindricus* Bates, 1866 = *A. inaequalis* (Thomson, 1868); *Adetus leucostigma* Bates, 1880 = *Adetus binotatus* (Thomson, 1868); *Adetus tuberosus* Galileo and Martins, 2003 = *Typophaula melancholica* Thomson, 1868; *Adetus latericius* Belon, 1902, and *Adetus irregularis* (Breuning, 1939) = *Adetus nanus* (Fairmaire and Germain, 1859). **New records:** *Adetus binotatus* for Chiapas, Guerrero, Tamaulipas, and Quintana Roo (Mexico), new state records; *A. inaequalis* for Amapá (Brazil), new state record; *A. punctatus* for Brazil (Rondônia), and Suriname, new country records; *Adetus bacillarius* Bates, 1885 for Mexico, new country record, and Brazil, new country record; *Adetus insularis* Breuning, 1940 for Mexico, new country record; *Adetus nanus*, for Brazil (Pará), new state record, Colombia and Venezuela, new country records. *Adetus validus* (Thomson, 1868) comb. nov. (from *Parmenonta* Thomson, 1868). **New genera and new species:** *Adetus x-fasciatus* Santos-Silva, Nascimento and Wappes, from Paraguay and Argentina; *Adetus monteverdensis* Santos-Silva, Nascimento and Wappes, from Costa Rica; *Adetus pseudobacillarius* Santos-Silva, Nascimento and Wappes, from Costa Rica; *Adetus clinei* Santos-Silva, Nascimento and Wappes, from Bolivia; *Adetaptera* Santos-Silva, Nascimento and Wappes, new genus, with *A. albisetosus* (Bates, 1880) comb. nov. designated as type species; *Adetaptera schaffneri* Santos-Silva, Nascimento and Wappes, from Mexico; *Morrisia* Santos-Silva, Nascimento and Wappes, new genus, for *M. squamosa* (Chemsak and Noguera, 1995) comb. nov., transferred from *Adetus* LeConte, 1852 and designated as type species, and *M. pulchra* Santos-Silva, Nascimento and Wappes, from Mexico; *Skillmania* Santos-Silva, Nascimento and Wappes, new genus, with *S. obrienorum* Santos-Silva, Nascimento and Wappes comb. nov., from Mexico, designated as type species. **New combinations:** The following 15 species are transferred from *Parmenonta* to *Adetaptera*: *A. albosticta* (Galileo and Martins, 2003), *A. chapadensis* (Martins and Galileo, 1999), *A. fulvosticta* (Bates, 1885), *A. insularis* (Fisher, 1930), *A. laevepunctata* (Breuning, 1940), *A. lenticula* (Galileo and Martins, 2006), *A. maculata* (Martins and Galileo, 1999), *A. minor* (Bates, 1880), *A. ovatula* (Bates, 1880), *A. parallela* (Lameere, 1893), *A. punctigera* (Germar, 1823), *A. strandiella* (Breuning, 1940), *A. thomasi* (Linsley and Chemsak, 1985), *A. wickhami* (Schaeffer, 1908), and *A. dominicana* (Galileo and Martins, 2004).

Key words. Lamiinae, Central America, Mexico, South America, taxonomy.

Introduction

Apomecynini (Cerambycidae) was originally proposed by Thomson (1860) as Apomecynitae, with the current tribal name coming into use by Bates (1880). It is one of the larger Lamiinae tribes found

in the New World with 340 species (plus five subspecies) in 39 genera currently assigned to it. *Adetus* LeConte, 1852, is the largest genus with 83 species and three subspecies included.

Linsley and Chemsak (1984: 119) reported: "This tribe has been variously defined." A classic understatement, particularly when trying to assign species between it or the closely related Pteropliini Thomson, 1860. Characters used by Thomson to separate these two tribes (both of which he proposed) included what he saw as differences in the mesotibial shape, with a dorsal sulcus in Apomecynini and absent in Pteropliini. This may have been a viable character in 1860 but trying to use this character for the dozens of genera and species, added by various authors to the tribes since then indicates it is no longer a useful character. As an example, the genus *Adetus* has species with distinctly different mesotibia; some with dorsal sulcus, some without and among those without a dorsal sulcus some have the mesotibia feebly carinate from mid-length. This character cannot be used to help separate or define tribes either as it is variable (mesotibia with or without dorsal sulcus) within some tribes such as Acanthoderini. Adding to the inconsistencies was Breuning (1971) with his revision of American Apomecynini. Examples include: in his alternative of couplet "2", "Eyes subdivided… *Acestrilla* Bat."; "Eyes strongly emarginate", leading to *Parmenonta* Thomson, 1868 and *Adetus*. However, in the redescription of *Adetus*, he affirmed that the eyes are "subdivided or nearly so", and in the redescription of *Parmenonta*, indicated that the eyes are "subdivided". In another example, Breuning (1971) separated *Parmenonta* from *Adetus* in his alternative of couplet "11" (translated): "Metaventrite shortened", leading to *Parmenonta*; "Metaventrite with normal length", leading to *Adetus*. However, in the redescription of *Parmenonta* he affirmed that the metaventrite is "more or less shortened." Such inconsistencies and misuse of character states make his key unreliable, if not impossible, to use.

The need for redefinition of most Lamiinae tribes is well beyond the scope of this work but certainly a well-known necessity and would very likely result in some synonymy among them, a reshuffling of generic assignments, and further pinpoint the need for redefinition of many genera. In this work five species synonymies are made, three new genera defined and described, seven new species described, fifteen species transferred to new or existing genera as "new combinations" and several new records also added to known species distributions. Illustrations are included for all the new taxa and for many of the closely related species or species placed in synonymy.

Materials and Methods

Photographs were taken in the MZSP with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1–5× macro lens, controlled by Zerene Stacker AutoMontage software. Measurements were taken in mm using a measuring ocular Hensoldt/Wetzlar - Mess 10 in the Leica MZ6 stereomicroscope, also used in the study of the specimens.

The acronyms used in the text are as follows:

ACMT American Coleoptera Museum (James Wappes), San Antonio, Texas, USA
CMNH Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, USA
FSCA Florida State Collection of Arthropods, Gainesville, Florida, USA
FWSC Frederick W. Skillman collection, Pearce, Arizona, USA
MZSP Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil
RFMC Roy F. Morris collection, Lakeland, Florida, USA
TAMU Texas A&M University insect collection, College Station, Texas, USA
USNM National Museum of Natural History, Washington, D. C., USA

Taxonomy

APOMECYNINI Thomson, 1860

Adetus binotatus (Thomson, 1868)

(Fig. 1–5)

Tautoclines binotata Thomson 1868: 155; Bates, 1872: 234; Thomson 1878: 11 (type); Bates, 1880: pl. 8, fig. 2.

Adetus binotatus; Bates 1880: 107; 1885: 342 (distr.); Aurivillius 1922: 289 (cat.); Blackwelder 1946: 596 (checklist); Breuning 1960: 181 (cat.); 1971: 314 (rev.); Chemsak et al. 1992: 114 (checklist); Monné and Giesbert 1994: 184 (checklist); Monné 1994: 25 (cat.); Maes et al. 1994: 29 (distr.); Noguera and Chemsak 1996: 404 (checklist); Maes 1998: 912 (distr.); Turnbow et al. 2003: 20 (distr.); Monné 2005: 277 (cat.); Audureau 2008: 14 (distr.); Swift et al. 2010: 49 (distr.); Maes et al. 2010: 80 (distr.); Monné 2018: 279 (cat.).

Adetus leucostigma Bates 1880: 108; 1885: 342 (distr.); Aurivillius 1922: 289 (cat.); Blackwelder 1946: 596 (checklist); Breuning 1960: 181 (cat.); Chemsak and Linsley 1970: 407 (lect.); Breuning 1971: 315; Chemsak et al. 1992: 114 (checklist); Monné and Giesbert 1994: 184 (checklist); Monné 1994: 27 (cat.); Noguera and Chemsak 1996: 404 (distr.); Martins and Galileo 2003: 374 (syn.); Turnbow et al. 2003: 20 (distr.); Monné 2005: 280 (cat.); Monné and Hovore 2006: 223 (checklist); Hovore 2006: 375 (distr.); Swift et al. 2010: 49 (distr.); Noguera and Gutiérrez 2016: 660 (distr.); Monné 2018: 382 (cat.). **Syn. nov.**

Tautoclines leucostigma; Lameere 1883: 57 (cat.).

Adetus venezuelensis Breuning 1942: 139; 1960: 181 (cat.); 1971: 315; Monné and Giesbert 1994: 185 (checklist); Monné 1994: 32 (cat.); Lingafelter et al. 2014: 359 (holotype).

According to Bates (1880): "It is difficult by description to make clear the differences between this species and *A. binotatus*, the colour and markings being very similar. The two, however, are very distinct. *A. leucostigma* is a decidedly narrower insect and is covered with coarser pubescence; the elytra are more gradually attenuated posteriorly, and the seriated punctures are more oblong." However, at least two differences (sculpturing and pubescence) pointed out by Bates (1880), to separate *A. leucostigma* (Fig. 1) from *A. binotatus* (Fig. 3), are intraspecifically highly variable. Furthermore, comparison of the pubescence in photographs of the holotypes (Fig. 1, and 3 respectively), does not indicate any visible differences. This can also be said for their body shape. Accordingly, we consider *A. leucostigma* to be a junior synonym of *A. binotatus*.

Lingafelter et al. (2014) reported the existence of a specimen in the collection of USNM with a primary type label of *Adetus venezuelensis* and commented: "*Adetus venezuelensis* Breuning 1942. The holotype is deposited in the Muséum national d'Histoire naturelle, Paris, France." Examination of photograph of that species (Fig. 6) indicates it is a specimen of *A. modestus* Melzer, 1934. Gérard L. Tavakilian (personal communication) said that the holotype of *A. venezuelensis* (Fig. 2) really is in MNHN. We confirm that the synonymy between *A. leucostigma* and *A. venezuelensis*, established by Martins and Galileo (2003), is correct.

Known geographical distribution (Monné 2018). Mexico (Veracruz, Jalisco), Guatemala, Belize, Honduras, Nicaragua, Costa Rica, Panama, Venezuela.

Material examined. MEXICO, *Chiapas* (**New state record**): 1 km S Ocosingo, 1 male, 3.VII.1986, J.E. Wappes col. (ACMT); 1 km W Ocosingo, 1 male, 10.IX–1.X.1986, J. Wappes col. (ACMT); Sumidero Cyn., 1 female 28.IX-4.X.1986, J. Wappes col. (ACMT); 2 km S. Chicoasén (Rd to Mirador), 1 male 18.VI.1989, H. Howden col. (ACMT). *Guerrero* (**New state record**): 2–3 km W 95 on 200, Viente Dos, 1 female, 15–16.IX.1989, J.E. Wappes col. (ACMT). *Tamaulipas* (**New state record**): 16 mi E Ocampo, 1 female, 26.X.1979, J. E. Wappes col (ACMT); Gomez Farias (1000′), 3 males, 8.V.1994, J.E. Wappes col (ACMT). *Jalisco*: Chamela Estn. UNAM, 1 male, 2-3.X.1992, J.E. Wappes col (ACMT); 7 km N Malacque, 1 female, 16–19.VII.1990, J.E. Wappes col (ACMT). *Quintana Roo* (**New state record**): 16–24 km N San Felipe Carrillo Puerto, 1 male, 1 female, 27.V–1.VI.1984, J.E. Wappes col. (ACMT). *Veracruz*: Pala Sola, 1 female, 25.X.1979, Wappes col. (ACMT); Puenta Nacional, 1 female, 25.X.1979, Wappes col. (ACMT). COSTA RICA, *Guanacaste*: Great Swamp, 1 male, no date and collector indicated (MZSP). *San José*: La Caja, 1 male, no date indicated, Schmidt col. (MZSP). PANAMA, *Herrera*: Parque Sarigua (7.5 km NW La Arena), 1 female, 22.VI.1996, Gillogly and Schaffner col. (ACMT). *Coclé*: El Valle (700

m), 1 female, 17.VII.1976, W.E. Clark col. (USNM). VENEZUELA, *Apure*: San Fernando de Apure, 1 female, 3.I.1960, Bordon col. (MZSP).

Adetus inaequalis (Thomson, 1868)

(Fig. 7–8)

Atimuropsis inaequalis Thomson 1868: 163; Lacordaire 1872: 605; Gemminger 1873: 3101 (cat.); Aurivillius 1922: 294 (cat.); Blackwelder 1946: 598 (checklist); Thomson 1878: 11 (type).

Adetus inaequalis; Breuning 1971: 306; Monné 1994: 27 (cat.); Monné and Giesbert 1994: 184 (cat.); Martínez 2000: 95 (distr.); Monné 2005: 279 (cat.); Morvan and Morati 2006: 41 (distr.); Monné and Hovore 2006: 223 (checklist); Morvan and Roguet 2013: 21 (distr.); Monné 2018: 382 (cat.).

Agennopsis cylindrica Bates 1866: 296. **Syn. nov.**

Adetus cylindricus; Gemminger 1873: 3099 (cat.); Aurivillius 1922: 289 (cat.); Blackwelder 1946: 596 (checklist); Breuning 1949: 17; 1960: 180 (cat.); 1971: 309; Monné 1994: 26 (cat.); Monné and Giesbert 1994: 184 (checklist); Monné 2005: 279 (cat.); Monné and Hovore 2006: 223 (checklist); Wappes et al. 2006: 24 (distr.); Wappes et al. 2013: 10 (distr.); Galileo et al. 2014b: 12 (distr.).

Examination of the holotype photographs of *A. inaequalis* (Fig. 7) and *A. cylindricus* (Fig. 8) reveal that they are the same species. The primary difference pointed out by the authors of the two species is the basal segment color of the antennae. According to Thomson (1868), the three basal segments in *A. inaequalis* are completely ochraceous, with the fourth ochraceous (reddish brown) with a black apex. While Bates (1866) reported the first two segments in *A. cylindricus* are tawny (reddish brown), the third also tawny with the apex black, and the fourth segment black. Although, it is not possible to be sure about the same antennomere colors in the holotype photographs (the same or not) differences such as this typically fall within the realm of normal intraspecific variation.

Although not previously commented on, a feature clearly visible in both holotypes and the specimens examined, is the presence on the elytra of a small, variable in size, yellowish-white pubescent tuft after midlength.

Known geographical distribution (Monné 2018). Ecuador, Colombia, Brazil (Pará), Peru, Bolivia (Beni, Cochabamba, Santa Cruz), French Guiana.

Material examined. PERU, *Junín*: Satipo, 1 female, no date indicated, A. Maller col. (MZSP). *Pasco*: Pozuzo, 1 female, VI.2012, local collector (MZSP). BOLIVIA, *Santa Cruz*: 5 km W Buena Vista (El Cairo), 1 male, 28–29.IV.2004, Wappes and Cline col. (ACMT); 4–6 km SSE Buena Vista (F and F Hotel), 16–31. XII.2002, Robin Clarke col. (ACMT); 21-24.XI.2003, Wappes, Morris and Nearns col. (ACMT); 17–30. IV.2003, Robin Clarke col. (ACMT). *Beni*: Vaca Diez (Riberalta, sawmill, 10°59′S / 66°03′W), 9–16.II.2013, Wappes and Bonaso, col. (ACMT); Rd to Guayamarim (25–30 km E Riberalta, @ MV/UV lights), 10.II.2013, Wappes and Bonaso col. (ACMT). *Cochabamba*: Carrasco (El Sacta, 220 m; beating), 20.X.2011, Wappes and Skillman col. (ACMT); N of Cristal Mayo (Rd to Pando Azul, 3 km N of Cochabamba Hwy; beating), 19.X.2011, Wappes and Skillman col. (ACMT). BRAZIL, *Amapá* (**New state record**): Porto Platon, 1 female, 20.VII.1961, J. and B. Bechyné col. (MZSP).

Adetus punctatus (Thomson, 1868)

(Fig. 9–13)

Agennopsis punctata Thomson 1868: 154.

Adetus punctatus; Gemminger 1873: 3099 (cat.); Aurivillius 1922: 289 (cat.); Blackwelder 1946: 597 (checklist); Breuning 1971: 300; Tavakilian 1991: 447 (syn.); Monné and Giesbert 1994: 185 (checklist); Monné 1994: 30 (cat.); 2005: 284 (cat.); Wappes et al, 2006: 24 (distr.); Monné and Hovore 2006: 224 (checklist); Morvan and Roguet 2013: 21 (distr.); Monné 2018: 387 (cat.).

Adetus guttulatus Belon 1902: 466; Aurivillius 1922: 289 (cat.); Blackwelder 1946: 596 (checklist); Breuning 1971: 299.

Thomson (1868) described *Agennopsis punctata* based on a single specimen from French Guiana. According to Tavakilian and Chevillotte (2018) the holotype is a male. Belon (1902) described *A. guttulatus* based on syntypes (2 males, 1 female) from Bolivia (Cochabamba). Tavakilian (1991), subsequently

synonymized both species, which is corroborated by the photograph of the holotype of *A. punctatus* (Fig. 9), and by a syntype of *A. guttulatus* (Fig. 10).

Although neither Thomson (1868) nor Belon (1902) commented on the metatibiae in males (Fig. 12) it is distinctly wider than in females (Fig. 13). Additionally, the size, and amount of yellow pubescent spots on the pronotum and elytra varies considerably (Fig. 9–11).

Known geographical distribution (Monné 2018). Bolivia (Beni, Cochabamba, La Paz, Santa Cruz), French Guiana.

Material examined. BOLIVIA, *Santa Cruz*: Buena Vista, 1 female, 18–25.X.1992, E. Giesbert col. (FSCA); 1 female, 17–19.X.2000, Wappes and Morris col. (ACMT); 1 female, 23–26.X.2000, Wappes and Morris col. (RFMC); 3 males, 27-29.X.2000, Wappes and Morris col. (ACMT); 2 females. 13-16. XI.2003, Wappes and Morris col (ACMT); 1 female, 16–31.I.2003, Robin Clarke col. (ACMT); 1 male, 1 female, 2–12.II.2000, J.E. Wappes col. (ACMT); 1 male, 15–28.II.2003, Robin Clarke col. (ACMT); 1 female, 5–8.V.2004, Wappes and Cline col. (ACMT); 4 females, 11–12.V.2004, Wappes and Cline col. (ACMT); Potrerillos del Guenda, 1 female, 3-5.III.2011, J. Wappes and D. Thomas col. (ACMT). *La Paz*: Tumapasa (Madidi N. P.), 1 male, 15.X.2004, J. Wappes and R. Morris col. (ACMT). SURINAME (**New country record**), *Marowijne*: Langamankondre, 1 male, VIII.1965, B. Malkin col. (MZSP). BRAZIL (**New country record**), *Rondônia*: 62 km SW Ariquemes (Fazenda Rancho Grande), 1 male, 6.X.1993, C.W. and L.B. O'Brien col. (ACMT).

Adetus bacillarius Bates, 1885

(Fig. 14–16, 81)

Adetus bacillarius Bates 1885: 344; Lameere 1893: 275 (distr.); Aurivillius 1900: 412 (distr.); 1922: 289 (cat.); Blackwelder 1946: 596 (checklist); Chemsak and Linsley 1970: 406 (lect.); Breuning 1971: 305; Chemsak et al. 1992: 114 (cat.); Cools 1993: 38 (paratypes); Monné 1994: 25 (cat.): Monné and Giesbert 1994: 184 (checklist); Martínez 2000: 95 (distr.); Turnbow et al. 2003: 20 (distr.); Ødegaard 2004: 86 (hosts); Monné 2005: 277 (cat.); Wappes et al. 2006: 24 (distr.); Hovore 2006: 375 (distr.); Monné and Hovore 2006: 223 (checklist); Swift et al. 2010: 49 (distr.); Galileo et al. 2014a: 9 (distr.); Lagos and Barrios 2014: 20 (distr.); Monné 2018: 378 (cat.).
Adetus bacilliarius; Audureau 2008: 14 (distr., error); Maes et al. 2010: 79 (distr., error).

Adetus bacillarius was originally described from Guatemala and Panama and subsequently has been reported from other Central and South American countries. As in other species of *Adetus*, the metatibiae is notably wider in males than in females. The mesotibiae is also distinctly sulcate dorsally with short, thick setae in this area.

As reported by Bates (1885), *A. bacillarius* is very similar to *A. cylindricus*. It differs by having the elytral apex with a narrow, light pubescent band (absent in *A. cylindricus*), and by the area near apex with only a short pubescent tuft laterally (which may be absent), without a transverse whitish band (*A. cylindricus* has a distinct transverse whitish pubescent band, in the same area, from suture toward sides).

Known geographical distribution (Monné 2018). Guatemala, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Venezuela, Bolivia (Santa Cruz), Paraguay.

Material examined. MEXICO (**New country record**), *Chiapas*: Parque Nacional Lagunas de Montebello (Laguna Pojoj), 1 male, 1 female, 12.VI.1989, H. Howden col. (ACMT); (Lagos des Colores), 1 female, 12.V.1969, J.M. Campbell col. (MZSP). COSTA RICA, *Limón*: Hamburg Farm (Rio Reventazón), 1 female, 10.XII.1923; 1 female, 10.VI.1923, F. Nervermann col. (MZSP). *Cartago*: Turrialba (800 m), 1 female, 25.VII.1923, Schild col. (MZSP). PANAMA, *Panama*: Cerro Campana, 1 male, 16–17 V.1999, Wappes and Morris col. (ACMT); Cerro Azul, 1 female, 29.V.1983, Wappes col. (ACMT). *Colón*: 2 km W Cuango, 1 male, 2.V.1992, Wappes col. (ACMT); 20 km E Portobello, 1 male, 14–17.II.1999, Wappes col. (ACMT). *Bocas del Toro*: 12 km W Chiriqui Grande, 1 male, 20–22.II.1999, Wappes col. (ACMT). BOLIVIA, *Santa Cruz* : 4–6 km SSE Buena Vista, Flora and Fauna Hotel, 1 male, 15–29 VIII.2003, R. Clarke col. (ACMT) ; 1 male, 2004, Wappes and Cline col. (MZSP) ; 1 female, 1–2 V.2004, Wappes & Cline col. (ACMT) ; 2 females, 27–29 X.2000, Wappes & Morris col. (ACMT) ; 1 female, 14–16 X.2000, Wappes & Morris col. (RFMC) ; 2 males, 1 female, 17–30.IV.2003, R. Clarke col. (ACMT); 5 km W Buena

Vista, El Cairo, 1 male, 18–30.VI.2003, R. Clarke col. (ACMT); Potrerillo del Guendá, 370 m, Reserva Natural, 40 km NW Santa Cruz, 17°40′S / 63°27′W, 1 female, 30.IX-3.X.2007, Wappes and Morris col. (ACMT); (400 m, 17°40.26′S / 63°27.43′W, 1 male, 6–9.X.2006, Wappes, Nearns and Eya col. (ACMT); 1 male, 16–22.X.2006, Wappes, Nearns and Eya col. (ACMT). BRAZIL (**New country record**), *Goiás*: Rio Araguaia, 1 specimen, VIII.1960, former Dirings col. (MZSP). *São Paulo*: Presidente Epitácio, 1 male, 22.X.1922, D.F. Dhans col. (MZSP). *Mato Grosso do Sul*: Três Lagoas (Fazenda Yamaguti – Córrego da Onça), 1 female, X.1964, Exp. Dep. Zool. col. (MZSP). *Pará*: Rodovia Transamazônica, Km 97, 1 female, A.C. Mendes col. (MZSP).

Adetus insularis Breuning, 1940

(Fig. 17–21)

Adetus insularis Breuning, 1940: 37; Blackwelder 1946: 596 (checklist); Breuning 1971: 298; Monné and Giesbert 1994: 184 (checklist); Monné 1994: 27 (cat.); 2005: 280 (cat.); 2018: 382 (cat.).

Adetus insularis was described and remains known only from Panama. Breuning (1940) did not comment, in his description of the species, on the sex of the holotype nor the shape of the metatibiae, which is wider distally in the male than in the female. The specimen examined has the metatibiae distinctly widened, hence it is a male.

Material examined. MEXICO (**New country record**), *Guerrero*: Hwy 200 (7 km N Ixtapa), 1 male, 17.VII.1985, J.E. Wappes col. (ACMT).

Adetus nanus (Fairmaire and Germain, 1859)

(Fig. 72–75)

Talaepora nana Fairmaire and Germain 1859: 522; Strauch 1861: 137.
Agennopsis nana; Thomson 1868: 154; Lacordaire 1872: 594; Thomson 1878: 20 (type).
Adetus nanus; Gemminger 1873: 3099 (cat.); Philippi 1887: 775 (cat.); Bruch 1912: 208 (cat.); Aurivillius 1922: 289 (cat.); Bruch 1939: 202 (distr.); Blackwelder 1946: 597 (checklist); Breuning 1960: 180 (cat.); 1971: 305; Cerda 1986: 37; Monné 1994: 29 (cat.); Monné and Giesbert 1994: 184 (checklist); Monné 2005: 282 (cat.); 2018: 384 (cat.).
Adetus latericius Belon 1902: 468, 472; Aurivillius 1922: 289 (cat.); Blackwelder 1946: 596 (checklist); Breuning 1960: 180 (cat.); 1971: 308; Monné 1994: 27 (cat.); Monné and Giesbert 1994: 184 (checklist); Monné 2005: 280 (cat.); Wappes et al. 2006: 24 (distr.); Martins et al. 2009: 517 (distr.); Monné 2018: 382 (cat.). **Syn. nov.**
Atimuropsis irregularis Breuning 1939: 233; Blackwelder 1946: 596 (checklist). **Syn. nov.**
Adetus irregularis; Breuning 1960: 180 (cat.); 1971: 310; Monné 1994: 27 (cat.); Monné and Giesbert 1994: 184 (checklist); Martins and Galileo 2003: 374 (syn.); Monné 2005: 280 (cat.); Morvan and Roguet 2013: 21 (distr.); Martins et al. 2014: 379 (distr.); Monné 2018: 382 (cat.).
Adetus gracilis Breuning 1940: 38; 1946: 598 (checklist); 1960: 180 (cat.); Zajciw 1966: 6 (distr.); Silva 1967: 35 (distr.); Breuning 1971: 308; Monné 1994: 27 (cat.); Monné and Giesbert 1994: 184 (checklist).

Fairmaire and Germain (1859) described the species based on a single specimen (Fig. 73) from Chile. Although it is not impossible that the species occurs in Chile, it has never been reported as being collected in that country since. Thus, it is probable that the holotype was incorrectly labeled. Bruch (1912) recorded *A. nanus* for Argentina.

Belon (1902) described *A. latericius* (Fig. 72) based on a single specimen from Bolivia. Comparing the original description of this species with that of *A. nanus*, as well as photographs of the holotypes, it is not possible to separate it from the latter.

Breuning (1939) described *Atimuropsis irregularis* based on a single specimen from Brazil (Pernambuco), and Breuning (1940) described *Adetus gracilis* based on syntypes from Brazil (Ceará). Breuning (1940) provided two dimensions, indicating he had, at least, two specimens ("Länge 7–9 mm; Breite 1⅔–2¼"), but he pointed out: "Typ von Brasilien: Cearà im britischen Museum." The available information is contradictory because Breuning (1971) affirmed that the species was described based on a single specimen. Breuning (1971) also provided a new record for *A. gracilis*: Brazil (Pernambuco). Martins and Galileo (2003) correctly synonymized *P. gracilis* (Fig. 75) with *P. irregularis* (Fig. 74). However,

the original descriptions, as well as photographs of the types do not allow separation of *A. irregularis* from *A. nanus*.

Known geographical distribution (Monné 2018). Chile, Bolivia (Cochabamba), French Guiana, Brazil (Maranhão, Pernambuco, Ceará), Argentina.

Material examined. COLOMBIA (**New country record**), *Bolivar*: Zambrano (Hacienda Monterrey, 70 m, 9°37′48″N 74°54′44″W), 1 female, no date indicated, F. Fernandez and G. Ulloa col. (MZSP). VENEZUELA (**New country record**), *Miranda*: 2 km SW Caucagua (300'), 1 female, 3.VIII.1988, C. & L. O'Brien & G. Wibmer col. (ACMT). BRAZIL, *Pará* (**New state record**): Óbidos (Pedras, rio Cuminá-Miri), 1 male, 1 female, 20-24.I.1968, Exp. Perm. Amaz. col. (MZSP).

***Adetus x-fasciatus* Santos-Silva, Nascimento and Wappes, sp. nov.**
(Fig. 22–27)

Description. Male (Fig. 22–25). Integument dark reddish-brown; head dark brown; palpomeres reddish-brown, gradually yellowish-brown toward apex; antennomeres III–XI reddish-brown.

Head. Frons coarsely, abundantly punctate; with yellowish pubescence, slightly more yellowish-brown toward vertex, obscuring integument (including most punctures). Vertex coarsely, abundantly punctate, except smooth area close to prothoracic margin; with yellowish pubescence not obscuring punctures, except denser pubescence close to prothorax. Area behind eyes with pubescence and punctures as on anterior area of vertex, slightly sparser toward ventral surface of head. Genae 1.7 times length of lower eye lobe; coarsely punctate on half close to eye, smooth anteriorly; with yellowish pubescence, slightly shorter than on frons. Antennal tubercles with sculpturing as on frons basally, shallower, slightly sparser toward apex; pubescence as on frons. Median groove barely visible from area between antennal tubercles to prothorax, absent on frons. Postclypeus with pubescence as on frons, but mostly directed forward. Labrum coplanar with anteclypeus at posterior half, inclined at anterior half; finely, abundantly punctate on coplanar area, nearly smooth on anterior half; with yellowish-brown pubescence partially obscuring integument on coplanar area, distinctly sparser on anterior half, with long, erect setae of same color interspersed directed forward; anterior margin with short fringe of yellow setae. Distance between upper eye lobes 0.76 times length of scape; in frontal view, distance between lower eye lobes 1.44 times length of scape. Antennae 0.87 times elytral length, slightly surpassing middle of elytra; scape, pedicel, and antennomeres III–IV with light yellowish-brown pubescence, interspersed with whitish pubescence, partially obscuring integument; remaining antennomeres with light yellowish-brown pubescence anteriorly and posteriorly, white centrally (less so on XI); ventral surface of antennomeres III–VII with short, erect yellowish-brown setae ventrally, gradually sparser toward VII. Antennal formula (ratio) based on length of antennomere III: scape = 0.62; pedicel = 0.20; IV = 0.62; V = 0.40; VI = 0.36; VII = 0.34; VIII = 0.33; IX = 0.29; X = 0.25; XI = 0.29.

Thorax. Prothorax about 1.2 times wider than long; sides rounded centrally; anterior margin narrower than posterior one. Pronotum coarsely, abundantly punctate except nearly smooth on narrow, longitudinal central area; this area covered by dense yellowish pubescence, from base to apex, with dense pubescence of same color laterally (inner margin of this area oblique); areas between dense bands with sparser, yellowish-brown pubescence; entire pubescence with short, thick white setae interspersed (somewhat scale-shaped). Sides of prothorax with dense yellowish pubescence close to pronotum and prosternum, sparser on wide central area. Ventral surface of thorax with dense yellowish pubescence slightly sparser, with white pubescence interspersed on central area of metaventrite. Scutellum with dense yellowish pubescence.

Elytra. Parallel-sided for anterior 2/3, gradually narrowed for posterior third, apex evenly rounded; coarsely, sparsely punctate dorsally; pubescence mostly light yellowish-brown, obscuring integument, except: two longitudinal, narrow, fragmented whitish pubescent bands from basal to apical quarter dorsally; wide, semicircular whitish pubescent bands laterally, with yellowish pubescence interspersed, extending from area close to humerus to posterior third, not reaching suture, collectively, when viewed from above, forming a large "X" shape; wide, oblique yellowish pubescent band across posterior quarter,

connecting across suture, with white pubescence interspersed; narrow, fragmented white pubescent band along suture.

Legs. Femora and tibiae with yellowish pubescence interspersed with white pubescence, nearly obscuring integument; mesotibiae distinctly dorsally notched at distal third; metatibiae with two, indistinct, dorsal transverse sulci at distal half, slightly elevated dorsally at beginning of distal quarter, then shallowly depressed; apex about 2.5 times wider than base.

Abdomen. Ventrites with yellowish pubescence partially obscuring integument, with white pubescence interspersed centrally, except sides of II–V with large (smaller in V), sparsely pubescent subcircular darker area laterally (some of them with glabrous areas); ventrite V not longitudinally sulcate centrally.

Female (Fig. 26–27). Integument mostly dark brown to piceous, with the pubescence darker than the male holotype; palpomeres mostly yellowish-brown, gradually lighter toward apex; antennomeres dark brown. Dense pubescent bands on pronotum yellowish-white. Mesoventral process and central area of metaventrite entirely with white pubescence; meso- and metatibiae as in male, but metatibiae with apex about twice width of basal area. Abdominal ventrite V slightly longitudinally sulcate at anterior 2/3 centrally.

Dimensions (mm), holotype male/paratype female. Total length 9.25/7.50; prothoracic length 2.00/1.70; anterior prothoracic width 1.85/1.65; posterior prothoracic width 2.20/1.85; maximum prothoracic width 2.35/1.95; humeral width 2.95/2.35; elytral length 6.75/5.30.

Type material. Holotype male from PARAGUAY, *Presidente Hayes* (no detailed place), 13.XI.1993, no collector indicated (MZSP). Paratype female from ARGENTINA, *Chaco*: 2 km N junction to Isla del Cerrito, 24.I.1989, C.W. and L. O'Brien and G. Wibmer col. (ACMT).

Remarks. Breuning (1971) redescribed *Adetus pusillus* (Fairmaire and Germain, 1859), with the redescription agreeing very well with the photograph of the holotype (Fig. 28). A single specimen identified as *A. pusillus* in the MZSP collection (Fig. 22–25) differs notably from that species (by the general shape, prothoracic shape, pubescence, punctation, etc.) and is an example of the new species *A. x-fasciatus* sp. nov. In Bezark (2019), there is another specimen identified as *A. pusillus* that is also *A. x-fasciatus* sp. nov. This latter specimen is from Chile ("Isla de Ozo") and belonged to the MNRJ collection. That specimen was destroyed in the fire that completely consumed the MNRJ in 2018. Thus, it is not possible to include it as a paratype. Furthermore, we were not able to find any place in Chile named "Isla de Ozo." For this reason, we consider it doubtful that Chile is a country where *A. x-fasciatus* sp. nov. occurs.

Zajciw and Monné (1968) recorded *A. pusillus* for Uruguay and reported (translated): "Described from Chile, subsequently recorded by Bruch for Formosa (Argentina). Very interesting finding for the country's fauna." Unfortunately, it is not possible to check if the records of *A. pusillus* for Uruguay and Argentina (Formosa) were really based on specimens of *A. pusillus*.

Adetus x-fasciatus sp. nov. resembles *A. atomarius invittatus* Breuning, 1971 by its light-colored dorsal pattern but it differs as follows: *A. x-fasciatus* sp. nov. with central subcircular pubescent band of the elytra wide, well-marked and contiguous throughout; in *A. atomarius invittatus* this band is narrower (or almost absent) with the distal portion more lateral, typically smaller and separated from the apical portion; in the former the lateral pubescent band at distal third is wide, in the latter species it is narrow and often reduced to a small, irregular fascia.

Etymology. Named for the light colored, x-shaped fascia on the elytra.

***Adetus monteverdensis* Santos-Silva, Nascimento and Wappes, sp. nov.**
(Fig. 29–32)

Description. Male. Integument blackish except dark reddish-brown mouthparts, lighter on apex of palpomeres.

Head. Frons coarsely, abundantly punctate; with light yellowish-brown pubescence not obscuring integument, yellower close to eyes, rather evenly interspersed with short white setae. Vertex coarsely,

abundantly punctate except smooth area close to prothoracic margin; center of area between antennal tubercles with dense yellowish pubescence, and sides with pubescence as on frons; area between upper eye lobes with pubescence as on frons, but distinctly sparser and shorter, except narrow yellowish pubescence close to eyes; remaining surface of vertex with light yellowish-brown pubescence nearly obscuring integument, shorter and slightly thicker than on frons. Area behind eyes moderately coarsely, abundantly punctate close to eye (this area widened and punctures distinctly coarser toward ventral surface of lower eye lobe); with light yellowish-brown pubescence partially obscuring integument, but not obscuring punctures, gradually, slightly sparser toward ventral surface of lower eye lobe. Genae 1.7 times length of lower eye lobe; coarsely, abundantly punctate close to inferior side of lower eye lobe, smooth on remaining surface; with dense light yellowish-brown pubescence not obscuring integument, sparser toward apex, with short white setae interspersed. Antennal tubercles coarsely, abundantly punctate basally, very finely punctate, nearly smooth toward apex; pubescence as on central area of frons, except nearly glabrous apex. Median groove lacking in frons, distinct from area between antennal tubercles and prothoracic margin. Postclypeus coarsely sparsely punctate; pubescence as on central area of frons, but distinctly sparser. Labrum coplanar with anteclypeus at posterior quarter, inclined on anterior 3/4; finely, abundantly punctate; with long golden setae directed forward, and fringe of short golden setae on anterior margin. Distance between upper eye lobes 0.69 times length of scape; in frontal view, distance between lower eye lobes 1.46 times length of scape. Antennae 0.8 times elytral length, reaching middle of elytra; with greenish-brown pubescence on basal segments, gradually yellowish-brown toward apex; scape, pedicel, antennomere III and basal third of antennomere IV with short, thick, abundant white setae (slightly denser on inferior surface of sides); pedicel and antennomeres III–IX with long, semi-erect brownish setae ventrally (distinctly more abundant in III, gradually sparser in remaining antennomeres). Antennal formula (ratio) based on length of antennomere III: scape = 0.65; pedicel = 0.17; IV = 0.58; V = 0.45; VI = 0.42; VII = 0.38; VIII = 0.37; IX = 0.35; X = 0.33; XI = 0.38.

Thorax. Prothorax gradually widened from anterolateral angles to about midlength, parallel-sided toward posterolateral angles, slightly wider posteriorly than central length. Pronotum with anterior margin convex and posterior margin straight; coarsely, sparsely punctate except anterior and posterior areas with punctures sparser; sides with dense yellow pubescence (more whitish on its inner margin); wide central area with yellowish-brown pubescence not obscuring integument, except light yellowish-brown macula on center of posterior half; entire surface with short, thick white setae interspersed, forming small spot centrally on posterior margin. Sides of prothorax coarsely, sparsely punctate; with dense yellow pubescence close to pronotum, yellowish-brown, distinctly sparser on remaining surface (slightly denser close to prosternum); superior half with short, thick white setae interspersed. Prosternum and prosternal process with yellowish-white pubescence not obscuring integument (more whitish depending on light intensity). Mesoventrite with irregular light yellowish-brown pubescent macula laterally and pubescent band of same color close to mesoventral process; central area with yellowish-white pubescent band; remaining surface with sparser light yellowish-white pubescence (notably shorter and sparser in some areas). Anterior area of mesoventral process abruptly elevated; dorsal surface moderately flat centrally, inclined laterally; sides gradually narrowed toward apex; posterior margin distinctly emarginate; with sparse yellowish-white pubescence laterally, nearly glabrous on centrodorsal surface. Mesanepisternum with moderately dense yellowish-brown pubescence with small white pubescent tufts interspersed. Mesepimeron with spare yellowish-brown pubescence. Metanepisternum and sides of metaventrite coarsely punctate, with dense yellowish-brown pubescence (not obscuring punctures) with small, white pubescent tufts interspersed; remaining surface of metaventrite smooth, with sparse yellowish-brown pubescence with short white setae interspersed. Scutellum with sparse yellowish-brown pubescence, with abundant, short white setae interspersed (white setae forming fringe on sides of posterior margin).

Elytra. Coarsely, sparsely punctate on basal half, gradually finer, sparser toward apex; apex individually rounded. Pubescence as follows: dense yellowish pubescent band laterally on basal third, gradually light yellowish-brown toward middle; narrow pubescent band, composed of small circular white pubescent spots (both elytra together form a U-shaped fascia), separate lateral yellow pubescent area from central darker brown, sparsely pubescent area, the narrow fascia ending before suture; area enclosed by U-shaped white band with yellowish-brown pubescence partially obscuring integument (not obscuring

punctures), with short white setae interspersed (forming very small tufts in some areas), distinctly shorter and sparser laterally close to white band; distal half of elytra with scattered white pubescent tufts, most are linearly aligned and a moderately large white pubescent spot on side of posterior half; with almost semicircular, white pubescent band on distal sixth, this same area with yellowish-brown pubescence partially obscuring integument; distal sixth with dark pubescence not obscuring integument, except area along suture with scattered sparse, short white setae.

Legs. Femora with yellowish-brown pubescence not obscuring integument, with short white setae interspersed (forming small tufts on some areas). Tibiae with pubescence as on femora, except yellow pubescence ventrally on distal third of meso- and metatibiae; dorsal surface of mesotibiae just after midlength slightly elevated, then concave, with row of thick, erect dark setae along concave area; apex of meso- and metatibiae about 2.5 times wider than basal area; apex of all tibiae with nearly golden fringe of thick setae. Dorsal surface of tarsomeres with grayish-white pubescence.

Abdomen. Ventrites with yellowish-brown pubescence (slightly yellower centrally on I–II), not obscuring integument, with short white setae interspersed (forming small tufts on some areas), except distal margin of I–IV with fringe of yellow pubescence, and sides of II–V with large, subcircular glabrous spot (smaller in V); ventrite V gradually depressed centrally; apex of ventrite V truncate, slightly emarginate centrally.

Dimensions (mm). Total length 11.40; prothoracic length 2.45; anterior prothoracic width 2.20; posterior prothoracic width 2.65; humeral width 3.50; elytral length 8.40.

Type material. Holotype male from COSTA RICA, *Puntarenas*: Prv. Monteverde, 5-7.VI.1983, J.E. Wappes col. (FSCA, previously in ACMT).

Remarks. *Adetus monteverdensis* sp. nov. is similar to *A. analis* (Haldeman, 1847) (Fig. 33–36), and *A. basalis* Martins and Galileo, 2010, but differs as follows: elytra with a narrow white, marginal band encompassing the large central, and basal, dark fascia (Fig. 29), completely lacking in both *A. analis* (Fig. 34) and *A. basalis*; meso- and metafemora more distinctly clavate with basal area narrower (Fig. 30) in *A. monteverdensis*, not distinctly clavate and basal area wider in *A. analis* (Fig. 35) and *A. basalis*; ventral pubescence sparse with a shining, glabrous integument centrally (Fig. 30), ventral pubescence moderately dense, integument not glabrous centrally in either *A. analis* (Fig. 35) or *A. basalis*.

Etymology. This species is named for Monteverde, Costa Rica, the type locality.

***Adetus pseudobacillarius* Santos-Silva, Nascimento and Wappes, sp. nov.**
(Fig. 76–80)

Description. Female. Integument mostly dark-brown, almost black in some areas; mouthparts reddish-brown, except yellowish-brown apex of palpomeres; elytra dark reddish-brown in posterior 2/3 irregularly interspersed with lighter areas; tarsi reddish-brown; scape (more dark-brown depending on light intensity), pedicel, antennomere III, and base of IV dark reddish-brown.

Head. Frons finely, abundantly punctate; with abundant yellowish-brown pubescence partially obscuring integument near eyes, and one irregular pubescent macula centrally on each side of median groove, between eyes and antennal tubercles. Vertex and area behind eyes with sculpturing as on frons; with yellowish-brown pubescence, except pale-yellow pubescence in central area behind eyes, sparser in sub-triangular area in center of vertex, obscuring integument in remaining surface. Genae about as long as lower eye lobe; finely (punctures finer than on frons), sparsely punctate; with yellowish-brown pubescence not obscuring integument, sparser toward apex. Antennal tubercles with sculpturing as on frons basally, gradually finer toward smooth apex; with yellowish-brown pubescence partially obscuring integument, slightly darker than on frons. Median groove slightly distinct from middle of frons to middle of area after upper eye lobes. Postclypeus with punctures slightly finer than on frons in wide central area, smooth laterally; with bristly yellowish-brown pubescence in wide central area, nearly entirely glabrous laterally. Labrum very finely punctate, inclined anteriorly; with yellowish-brown pubescence more abundant, with long, erect setae of same color interspersed near postclypeus, sparser in inclined

area; anterior margin with dense fringe of golden setae. Distance between upper eye lobes 1.14 times length of scape; in frontal view, distance between lower eye lobes 1.65 times length of scape. Antennae 0.8 times elytral length, reaching about middle of elytra; scape, pedicel, and antennomere III with pale-yellow pubescence nearly entirely obscuring integument; base and basal inner side of antennomere IV with pale-yellow pubescence, and remaining surface with dark reddish-brown pubescence; remaining antennomeres brown pubescent with a few longer, decumbent, pale-yellow setae interspersed; antennomeres IV–VIII with sparse, long, erect, dark setae ventrally (sparser toward VIII). Antennal formula (ratio) based on length of antennomere III: scape = 0.58; pedicel = 0.20; IV = 0.62; V = 0.40; VI = 0.36; VII = 0.34; VIII = 0.30; IX = 0.28; X = 0.24; XI = 0.26.

Thorax. Prothorax slightly rounded laterally from anterolateral angles to posterior quarter, then parallel-sided. Pronotum with wide, shallow transverse sulcus in anterior third; coarsely, abundantly punctate except anterocentral area with sparse punctures; sides with dense pale-yellow pubescence, with inner margin of this area slightly narrowed toward posterior margin, and with semicircular notch before middle; central area with narrow longitudinal pale-yellow band in posterior half, moderately small, longitudinal pale-yellow pubescent band in center of anterior third, and small pale-yellow pubescent macula at middle of anterior margin; remaining surface of anterior margin with abundant yellowish-brown pubescence; remaining surface with sparse, short yellowish-brown setae, part of them emerging from punctures, some placed between punctures, sparser anteriorly and centrally. Sides of prothorax with sculpturing as in pronotum; with dense pubescence obscuring integument, pale-yellow in some areas, yellowish-brown in others, except small area placed centrally near pronotum, with distinctly sparse pubescence. Prosternum with yellowish-brown pubescence partially obscuring integument. Prosternal process with pale-yellow pubescence not obscuring integument. Mesoventrite coarsely, abundantly punctate; with yellowish-brown pubescence partially obscuring integument, except pale-yellow pubescence close to mesoventral process. Mesanepisternum and mesepimeron coarsely, abundantly punctate; with yellowish-brown pubescence partially obscuring integument, except sparse pubescence close to mesoventrite in mesanepisternum. Mesoventral process with dense pale-yellow pubescence. Metanepisternum and metaventrite coarsely, abundantly punctate; with yellowish-brown pubescence in metanepisternum and sides of metaventrite, not obscuring integument, and pale-yellow pubescence on remaining surface of metaventrite, partially obscuring integument. Scutellum with sparse pale-yellow pubescence.

Elytra. Coarsely, abundantly punctate in basal third, gradually finer, sparser toward apex; apices individually rounded. Pubescence as follows; with sparse tufts of yellowish-brown pubescence, with sparse setae of same color interspersed in semielliptical central area in anterior third; with small, elongate, dense tufts of pale-yellow pubescence in sides of dorsal surface about middle of elytra; remaining surface with yellowish-brown pubescence marbled with pale-yellow and white pubescence (white pubescent, especially in posterior half), sparse in several irregular areas.

Legs. Profemora with yellowish-brown pubescence, with short pale-yellow and white setae interspersed; meso- and metafemora with yellowish-brown pubescence (dark yellowish-brown in some irregular areas), slightly sparser than in profemora, with short, nearly scale-shaped white setae interspersed; profemora distinctly wider than meso- and metafemora, with metafemora thinner than mesofemora. Inner side of apex of protibiae with distinctly spiniform projection; pubescence and white setae as in femora, following the same pattern of distribution from protibiae to metatibiae.

Abdomen. Ventrites finely, sparsely punctate; with yellowish-brown pubescence not obscuring integument in ventrite I, gradually denser, more pale-yellow toward V; with fringe of longer pale-yellow setae in apex of I–IV.

Dimensions (mm). Total length 8.30; prothoracic length 1.90; anterior prothoracic width 1.70; posterior prothoracic width 1.65; widest prothoracic width 1.75; humeral width 2.10; elytral length 6.00.

Type material. Holotype female from COSTA RICA, *Puntarenas*: Prv. Monteverde, 5–7.VI.1983, J.E. Wappes col. (FSCA, previously in ACMT).

Remarks. *Adetus pseudobacillarius* sp. nov. is similar to *A. tayronus* Galileo and Martins, 2003 (Fig. 82) by the presence of elongate pubescent tuft about middle of the elytra but differs by the punctures on

pronotum distinctly more abundant. It is also very similar in appearance to *A. bacillarius,* including its pronotal pubescence and sculpturing and by the presence of a tooth on the inner side of the protibiae, but differs by the denser elytral pubescence, the pubescent tuft in middle of the elytra distinctly larger and the elytral apices (Fig. 80) narrower and rounded. In *A. bacillarius* the elytral pubescence is distinctly sparser (Fig. 14), the pubescent tuft in middle of the elytra is shorter (Fig. 14), and the elytral apices are obliquely truncate (Fig. 81).

Etymology. This species is remarkably similar in appearance to *Adetus bacillarius*, hence its name.

***Adetus clinei* Santos-Silva, Nascimento and Wappes, sp. nov.**
(Fig. 83–86)

Description. Female. Integument mostly black; mouthparts dark reddish-brown, with apex of palpomeres lighter.

Head. Frons finely, abundantly punctate; with pale-yellow pubescence nearly obscuring integument, slightly darker toward antennal tubercles, with short, decumbent white setae interspersed. Vertex and area behind eyes with sculpturing as in frons; area between antennal tubercles and upper eye lobes with pale-yellow pubescence partially obscuring integument, with short, decumbent white setae interspersed; area of vertex between posterior margin of upper eye lobes and prothorax with short yellowish-brown pubescence not obscuring integument; area behind eye lobes with dense light yellowish-brown pubescence, more pale-yellow close to prothorax, except oblique band with reddish-brown pubescence behind lower eye lobe, with short, decumbent white setae interspersed. Genae twice length of lower eye lobe; with dense yellow pubescence obscuring integument, with short, decumbent white setae interspersed, except glabrous apex. Antennal tubercles with sculpturing as in frons basally, gradually finer toward smooth apex; with yellowish-brown pubescence not obscuring integument, with short, decumbent white setae interspersed. Median groove slightly distinct in frons, distinct from area between antennal tubercles to prothorax. Postclypeus with punctures finer than on frons in wide central area, smooth laterally; with bristly pale-yellow pubescence in wide central area, with white setae interspersed, more abundant centrally, and a few long, erect pale-yellow setae; glabrous laterally. Labrum very finely punctate, inclined anteriorly; with pale-yellow pubescence and long, erect setae of same color interspersed. Distance between upper eye lobes 1.1 times length of scape; in frontal view, distance between lower eye lobes 1.7 times length of scape. Antennae 0.9 times elytral length, slightly surpassing middle of elytra; scape, pedicel, and antennomere III with pale-yellow pubescence nearly obscuring integument, and short, decumbent white setae interspersed; dorsal and lateral surfaces of antennomere IV with pale-yellow pubescence and short, decumbent white setae interspersed, and ventral surface with reddish-brown pubescence and short, decumbent white setae interspersed; antennomeres V–XI with reddish-brown pubescence and short, decumbent white setae interspersed; pedicel and antennomeres III–X with long, erect, dark setae ventrally, distinctly sparser toward X. Antennal formula (ratio) based on length of antennomere III: scape = 0.62; pedicel = 0.24; IV = 0.67; V = 0.48; VI = 0.40; VII = 0.38; VIII = 0.35; IX = 0.30; X = 0.27; XI = 0.38.

Thorax. Prothorax slightly rounded and divergent laterally in anterior third, then parallel-sided toward posterolateral angles. Pronotum coarsely, abundantly punctate except finer punctures anteriorly; sides with dense pale-yellow pubescence; with moderately wide, slightly dense longitudinal light yellowish-brown pubescent band centrally (distinctly denser close to posterior margin), sparser on anterior third; remaining surface with dark yellowish-brown pubescence not obscuring integument, and thick, short, decumbent white setae emerging from coarse punctures (also from minute punctures near anterior margin). Sides of prothorax coarsely, abundantly punctate; with dense pubescence superiorly, forming four moderately distinct transverse bands, yellowish-brown close to pronotum (with small, subrounded glabrous area centrally), followed by pale-yellow, yellowish-brown, not reaching anterior and posterior margins, and pale-yellow; inferior half with dark yellowish-brown pubescence, not obscuring integument, and dense yellow pubescence close to prosternum. Prosternum with sparse yellowish-white pubescence, slightly denser on posterocentral area of prosternal process. Mesoventrite with dense, longitudinal white pubescent band centrally, dense yellowish-brown pubescence each side of white pubescent band, not reaching procoxal cavity, sparse white pubescence in front of mesocoxal cavities and on mesoventral process,

and sparse yellowish-brown pubescence laterally, distinctly more abundant centrally. Mesanepisternum coarsely punctate; with dense yellow pubescence close to mesoventrite, gradually yellowish-brown toward elytron, with a few thick white setae interspersed. Mesepimeron with sparse yellowish-brown pubescence with white pubescence interspersed. Metanepisternum covered by elytron in distal half; with sparse grayish-white pubescence. Metaventrite coarsely, sparsely punctate laterally; with grayish-white pubescence not obscuring integument. Scutellum with yellowish-brown pubescence partially obscuring integument, with thick white setae interspersed.

Elytra. Coarsely punctate in basal third, gradually finer, sparser toward apex; apices individually rounded. Pubescence as follows: wide pale-yellow pubescent band on basal seventh of humeral region, narrowed toward its apex; short, slightly distinct pale-yellow pubescent macula basally, between humerus and scutellum; short, triangular pale-yellow pubescent band along suture under scutellum; two/three very small pale-yellow pubescent spots on basal third, together forming somewhat oblique band; small, elliptical dense pale-yellow macula at sides of middle of dorsal surface; small, dense yellow pubescent spot in inclined area of basal third; two slender and short yellow pubescent maculae in dorsal surface of posterior third (together, forming oblique band); remaining surface with reddish-brown pubescence not obscuring integument, with short, decumbent, thick white setae interspersed (part of them emerging from punctures).

Legs. Profemora and protibiae with reddish-brown pubescence not obscuring integument, with short, thick white setae interspersed, except ventral surface of femora with denser white pubescence and lobes of femora and base of tibiae with yellow pubescence. Meso- and metafemora with pubescence as in profemora; protibiae without tooth at inner side of apex. Meso- and metatibiae with pubescence somewhat darker and sparser than in protibiae, but with white setae distinctly more abundant.

Abdomen. Ventrites with abundant grayish-white pubescence, not obscuring integument, except apex with fringe of yellow pubescence, longer in ventrite V; apex of ventrite V truncate.

Dimensions (mm). Total length 8.40; prothoracic length 2.25; anterior prothoracic width 1.85; posterior prothoracic width 2.15; widest prothoracic width 2.20; humeral width 2.65; elytral length 6.10.

Type material. Holotype female from BOLIVIA, *Santa Cruz*: El Cairo (5 km W Buena Vista), 28–29. IV.2004, Wappes and Cline col. (FSCA, previously in ACMT).

Remarks. *Adetus clinei* sp. nov. is somewhat similar to *A. bacillarius* but differs by the stouter body (Fig. 83), coarser and sparser punctures on pronotum (Fig. 83), and the inner apex of the protibiae without a spined projection. In *A. bacillarius*, the body is slenderer (Fig. 14), punctures on pronotum are finer and denser (Fig. 14), and the protibiae have a distinct spined projection on inner side of the apex. It differs from *A. nanus* by the stouter body (slenderer in *A. nanus* (Fig. 72–75)), and lower eye lobes (Fig. 86) smaller (larger (Fig. 87) in *A. nanus*). It also resembles *Adestus atomarius atomarius* Belon, 1902 (see photograph of a syntype at Bezark 2019), but differs by the elytral pubescence pattern; in *A. a. atomarius*, there is no yellow pubescent tuft on middle of the elytra, distinctly contrasting with the remaining dorsal pubescence, there are several small white pubescent spots in the elytra (absent in *A. clinei*) and an oblique white pubescent band near apex (absent in *A. clinei*).

Etymology. This species is named for notable entomologist and good friend, Andrew Cline, one of the collectors of the holotype.

Adetus validus (Thomson, 1868), comb. nov.

(Fig. 37–38)

Parmenonta valida Thomson 1868: 158; Lacordaire 1869: 274; Gemminger 1873: 2997 (cat.); Thomson 1878: 8 (type); Bates 1880: 104; 1885: 340 (distr.); Aurivillius 1922: 288 (cat.); Blackwelder 1946: 596 (checklist); Breuning 1960: 181 (cat.); 1971: 318; Chemsak et al. 1980: 35 (distr.); Chemsak et al. 1992: 116 (checklist); Maes et al. 1994: 50 (distr.); Monné and Giesbert 1994: 189 (checklist); Monné 1994: 33 (cat.); Noguera and Chemsak 1996: 404 (checklist); Maes 1998: 914 (distr.); Turnbow et al. 2003: 21 (distr.); Monné 2005: 305 (cat.); Hovore 2006: 375 (distr.); Maes et al. 2010: 111; Monné 2018: 413 (cat.).

Adetus validus; Bates 1872: 200 (distr.); 1880: pl. 8, fig. 3.
Parmenonta valida; Perkins and Swezey 1924: 51.

Linsley and Chemsak (1985) reported: "The species of *Parmenonta*, with the exception of *valida*, have reduced or absent wings and a greatly retracted metasternum… the numerous species of *Adetus* LeConte vary considerably and species exist with intermediate characters which link *Adetus* and *Parmenonta* together. Although *valida* is better assignable to *Adetus*, we are retaining the name *Parmenonta*." Examination of specimens of *Parmenonta valida* shows that Linsley and Chemsak (1985) were correct because the metaventrite is not noticeably reduced, and the membranous wings are present and well-developed. As Breuning (1971) designated *P. valida* as type species of *Parmenonta*, and there are no viable features to separate this species from those of *Adetus* (especially the type species, *Polyopsia analis* Haldeman, 1847), the case is made to synonymize *Parmenonta* with *Adetus*. However, other species examined, currently placed in *Parmenonta*, are apterous (or, according to Linsley and Chemsak (1985) could be brachypterous), making it necessary to create a new genus for those species. Although the metaventrite in *Adetus* species can be variable in length, it is always noticeably longer than the mesoventrite, while Bates (1880) observed that the metaventrite is particularly short in *Parmenonta*. Bates (1880) also commented "the under wings are present." This is not true in *Parmenonta albisetosa* (Fig. 41–45) described by him in the same work but now placed in *Adetaptera* (*A. albisetosa* (Bates, 1880) comb. nov.).

Adetus validus was originally described from Mexico (without exact locality), it was incorrectly reported by Lacordaire (1869) for Brazil. It is not possible to recognize the species confused with *P. valida* by Lacordaire (1869) but, it is not of this species. Still, according to Lacordaire (1869) (translated): "This insect, native of Brazil, is known in the collections of Paris under the unpublished name of *Agennopsis valida* Chevrol." This information, probably, was originally based in Thomson (1868): "**P. valida** (Chevrt., mss., *Agennopsis*)." Thus, the citation of *Agennopsis valida* by Thomson (1868) as being equal to *Parmenonta valida* is incorrect. According to Monné (2018), the species is known from Mexico (Veracruz), Guatemala, Honduras, Belize, and Nicaragua. However, Brazil has not been formally excluded as a country where *Adetus validus* occurs. Hence, we formally exclude it from the Brazilian fauna here. The specimen in Maes et al. (2010: 112), from Nicaragua (Matagalpa, Selva Negra) is not *Adetus validus* either and likely belongs to *Adetaptera* gen. nov.

Adetaptera Santos-Silva, Nascimento and Wappes, gen. nov.

Etymology. From "*Adetus*" (genus of *Apomecynini*) + aptera (wingless). Feminine gender.

Type species. *Parmenonta albisetosa* Bates, 1880, here designated.

Description. Body from small to moderate-sized, cylindrical. Head retractile; frons transverse; antennal tubercles flat or slightly elevated, widely separated; eyes coarsely faceted, small, divided; lower eye lobes much shorter than gena; antennae distinctly not reaching elytral apex; scape short, slightly surpassing anterior margins of prothorax; antennomere III longer than scape; antennomere IV shorter than III; remaining antennomeres shorter than IV, decreasing in length or with similar length. Prothorax from about as long as wide to slightly longer than wide; sides unarmed; in side view, very slightly inclined toward posterior margin, not tuberculate. Procoxal cavities closed posteriorly; prosternal process distinctly, gradually widened toward apex. Metaventrite noticeably reduced (Fig. 40, 43), slightly wider than mesoventrite. Elytra from equal to very slightly wider basally than posterior area of prothorax; parallel-sided from humerus to distal quarter, then gradually rounded, or gradually widened from base to about middle, then gradually narrowed toward apex; apex rounded, slightly truncate or distinctly bispinose; in side view, dorsal surface nearly uniformly convex; without erect setae. Membranous wings absent (Fig. 39, 42). Legs short, femora gradually, slightly clavate, or almost fusiform. Abdominal ventrite V not deeply excavate posterocentrally in both sexes.

Remarks. *Adetaptera* gen. nov. differs from *Adetus* by the membranous wings absent (present in *Adetus*), and by the metaventrite distinctly reduced (not so in *Adetus*).

Species, besides the type species, transferred to *Adetaptera*: *A. albosticta* (Galileo and Martins, 2003) comb. nov.; *A. chapadensis* (Martins and Galileo, 1999) comb. nov.; *A. fulvosticta* (Bates, 1885) comb.

nov.; *A. insularis* (Fisher, 1930) comb. nov.; *A. laevepunctata* (Breuning, 1940) comb. nov.; *A. lenticula* (Galileo and Martins, 2006) comb. nov.; *A. maculata* (Martins and Galileo, 1999) comb. nov.; *A. minor* (Bates, 1880) comb. nov.; *A. ovatula* (Bates, 1880) comb. nov.; *A. parallela* (Lameere, 1893) comb. nov.; *A. punctigera* (Germar, 1823) comb. nov. (Fig. 39–40); *A. strandiella* (Breuning, 1940) comb. nov.; *A. thomasi* (Linsley and Chemsak, 1985) comb. nov.; *A. wickhami* (Schaeffer, 1908) comb. nov. Although *A. dominicana* (Galileo and Martins, 2004) is provisionally transferred to *Adetaptera*, it may (because of its antennal length and shape, and presence of long, erect setae of elytra) belong to another genus.

It is also possible that other species currently placed in *Adetus* belong to *Adetaptera*, and that species placed in *Adetaptera* belong to *Adetus*.

***Adetaptera schaffneri* Santos-Silva, Nascimento and Wappes, sp. nov.**
(Fig. 46–49)

Description. Male. Integument mostly brown, interspersed with irregular dark reddish-brown areas (lighter on some areas); anteclypeus and labrum reddish-brown; palpomeres yellowish-brown; distal 2/3 of antennomere III reddish brown; basal third of antennomere IV reddish brown; remaining antennomeres brown; tibia gradually reddish brown on distal half; tarsi mostly dark reddish brown.

Head. Frons coarsely, sparsely punctate; with light yellowish-brown pubescence (lighter depending on light intensity), abundant, but not obscuring integument, slightly denser laterally and toward antennal tubercles; with a few long, erect brownish setae close to eyes. Vertex coarsely, sparsely punctate; with yellowish-brown pubescence (lighter depending on light intensity), dense laterally, sparser centrally. Area behind eyes coarsely, abundantly punctate (punctures coarser behind lower eye lobe); pubescence as on sides of vertex. Genae 1.45 times length of lower eye lobe; with a few coarse punctures toward ventral surface, smooth toward dorsal surface; pubescence as behind eyes (distinctly sparser in area close to frons). Antennal tubercles finely, sparsely punctate anteriorly, smooth in remaining surface; pubescence as on frons, slightly sparser in some areas. Median groove absent. Postclypeus finely, sparsely punctate in wide central area, smooth laterally; with sparse light yellowish-brown pubescence, with a few long, erect brownish setae interspersed. Labrum coplanar with anteclypeus at posterior 2/3, inclined at anterior third (concave at center of anterior area); with a few short yellowish-brown setae except short, dense yellow pubescence in concave area. Distance between upper eye lobes 0.94 times length of scape; in frontal view, distance between lower eye lobes 1.30 times length of scape. Antennae as long as elytra (only holotype measured), slightly surpassing middle of elytra; scape, pedicel, antennomere III, and basal 2/3 of antennomere IV with moderately sparse light yellowish-brown pubescence (lighter depending on light intensity); remaining surface of antennomere IV and antennomeres V–XI with slightly paler pubescence; antennomeres III–IV with long brownish setae ventrally, more abundant on III; remaining surface of III–IV and entire surface of V–XI with short, sparse, erect yellowish setae. Antennal formula (ratio) based on length of antennomere III: scape = 0.55; pedicel = 0.18; IV = 0.69; V = 0.34; VI = 0.24; VII = 0.22; VIII = 0.18; IX = 0.18; X = 0.18; XI = 0.20.

Thorax. Prothorax longer than wide, cylindrical, slightly widened centrally. Pronotum coarsely, sparsely punctate; with narrow, longitudinal light yellowish-brown pubescent band centrally (lighter depending on light intensity), from base to apex, with dense pubescence of same color laterally, and sparse pubescence of same color between sides and central pubescent band. Sides of prothorax with pubescence as in sides of pronotum, gradually, slightly less dense toward prosternum. Ventral surface of thorax with sparse light yellowish-brown pubescence, denser laterally. Scutellum with light yellowish-brown pubescence except glabrous centrobasal area.

Elytra. Sides arched; apex with outer angle forming large triangular projection, and sutural angle forming small triangular projection, with area between them concave; coarsely, sparsely punctate (punctures slightly finer toward apex). Pubescence light yellowish-brown (lighter depending on light intensity), as follows: basal fifth with large, subtriangular macula, reaching humeri, abundant in some areas, sparser in others, not obscuring integument, partially connected along sides of elytra with oblique dense band, not reaching midlength of elytra and suture; oblique row with three spots of dense pubescence, placed dorsally, slightly after middle of elytra; another oblique row with two spots of dense pubescence close

to the former; another irregular spot with dense pubescence at distal fifth; remaining surface with very sparse pubescence, slightly more abundant on sides of midlength, and posterior fifth.

Legs. Femora with yellowish-white pubescence (brighter white depending on light intensity) distinctly not obscuring integument. Tibiae with pubescence as on femora; with short, suberect yellowish setae ventrally; dorsal distal third of meso- and metatibiae carinate, with row of thick, erect, short yellow setae, along carina, curved toward outer apex posteriorly. Tarsi with pubescence as on femora.

Abdomen. Ventrites I–IV with dense yellowish-brown pubescence laterally (lighter depending on light intensity), distinctly sparser centrally; V with dense yellowish-brown pubescence throughout (lighter depending on light intensity); apex of ventrite nearly truncate.

Female. Antennae slightly shorter (0.9 times elytral length), almost reaching midlength of elytra; abdominal ventrite V longitudinally sulcate.

Variation. Anteclypeus and labrum dark brown; elytra dark reddish brown, gradually lighter toward apex; tibiae entirely dark brown.

Dimensions (mm), holotype/paratype males/paratype females. Total length 6.20/6.25–7.25/7.40–7.40; prothoracic length 1.50/1.50–1.70/1.70; anterior prothoracic width 1.15/1.15–1.35/1.45; posterior prothoracic width 1.30/1.25–1.45/1.55; maximum prothoracic width 1.35/1.30–1.55/1.65; humeral width 1.45/1.40–1.65/1.75; elytral length 4.25/4.20–4.95/5.05.

Type material. Holotype male from MEXICO, *Oaxaca*: 2 miles north San José del Pacífico, 16.VII.1974, Clark, Murray, Ashe and Schaffner col. (TAMU). Paratypes – same data as holotype, 6 males, 3 females (3 males, 2 females TAMU, 1 male, 1 female ACMT, 1 male FSCA, 1 male MZSP); 1 male, 20.VII.1974 (TAMU).

Remarks. All other species currently placed in *Adetaptera* have the elytral apex rounded or nearly so. As *A. schaffneri* sp. nov. has both the lateral and interior margin of the elytral apices with acute spines, it may be better placed in a new genus, however, because the elytral shape by itself does not justify erecting a new genus we have provisionally included it in *Adetaptera*.

Etymology. Named to recognize and honor Joseph Schaffner, retired Texas A&M University Entomology Professor.

Morrisia Santos-Silva, Nascimento and Wappes, gen. nov.

Etymology. Derived from "Morris" (after Roy F. Morris, II) and the suffix "ia". Named to honor and recognize our good friend, Roy F. Morris, II, Lakeland, FL for his notable expertise in finding new Cerambycidae species wherever he treads (he has collected the holotype of more than 100 described New World Cerambycidae species). Feminine gender.

Type species. *Adetus squamosus* Chemsak and Noguera, 1995, here designated.

Description. Body moderate-sized, cylindrical. Head retractile; frons transverse; antennal tubercles flat, widely separated; eyes from moderate to coarsely faceted, small, not or imperfectly divided (area between lobes with a single row of ommatidia or lacking them); lower eye lobes much shorter than gena; antennae surpassing middle of elytra in male, not reaching middle in female; scape short, slightly surpassing anterior margin of prothorax, slender in female; antennomere III much longer than scape; antennomere IV distinctly shorter than III; remaining antennomeres much shorter than IV, with similar length. Prothorax slightly longer than wide; sides unarmed; in side view, pronotum gradually inclined toward posterior margin from about middle, not tuberculate. Procoxal cavities closed posteriorly; prosternal process distinctly, gradually widened toward apex. Metaventrite not distinctly reduced. Elytra parallel-sided from humerus to distal quarter, then gradually rounded; in side view, dorsally sinuous; dorsal base with broad, elevated gibbosity, posterior two-thirds distinctly convex dorsally; without erect setae. Membranous wings present, well-developed. Legs short; femora gradually clavate. Abdominal ventrite V deeply excavated posterocentrally in female, not so in male.

Remarks. *Morrisia* gen. nov. differs from *Adetus* as follows: elytra sinuous dorsally in side view; dorsobasal area of the elytra with gibbosity; abdominal ventrite V of female deeply excavated posterocentrally. In *Adetus*, the elytra are uniformly convex in side view, and do not have a basal gibbosity dorsally, and the abdominal ventrite V of female is, at most, longitudinally and slightly sulcate centrally, with distal area not or slightly and gradually inclined. *Morrisia* gen. nov. differs from *Adetaptera* gen. nov. by these same features but also by membranous wings being present (absent or brachypterous in *Adetaptera*).

***Morrisia squamosa* (Chemsak and Noguera, 1995), comb. nov.**
(Fig. 55–59)

Adetus squamosus Chemsak and Noguera 1995: 90; Monné 2005: 284 (cat.); Toledo 2005: 421 (distr.); Monné and Hovore 2006: 224 (checklist); Zaragoza-Caballero and Pérez-Hernández 2017: 30 (holotype); Monné 2018: 388 (cat.).

Morrisia squamosa is currently known only from Mexico (Jalisco, Guerrero) (Monné 2018).

Known geographical distribution (Monné 2018). Mexico (Jalisco, Guerrero).

Material examined. MEXICO, *Guerrero*: Hwy 200, 41 km NE Ixtapa, 1 male, 17–20.VII.1985, J.E. Wappes col. (ACMT); *Jalisco*: 11 km N. Autlan, August 2, 1978, J. C. Schaffner, D. Plitt (TAMU); MX 206, 1.2 km S La Cumbre, 3.VIII.2011, Skillman and Turnbow (FWSC).

***Morrisia pulchra* Santos-Silva, Nascimento and Wappes, sp. nov.**
(Fig. 50–54, 60)

Description. Female. Integument mostly black; apex of last palpomeres and basal 2/3 of abdominal ventrite V dark reddish brown.

Head. Frons, vertex, and area behind upper eye lobes finely, abundantly punctate; with short, decumbent, scale-shaped white setae, interspersed with abundant, similar yellow setae, together obscuring integument. Area behind lower eye lobes, and between upper eye lobes with short, decumbent, scale-shaped yellow setae, with similar shaped, sparse white setae interspersed. Genae slightly longer than 3.0 times length of lower eye lobe; with setae same as behind lower eye lobes toward inferior surface, similar shaped and mostly white toward dorsal surface and apex. Antennal tubercles with setae as on frons, except narrowly glabrous in distal area. Postclypeus with short, partially bristly, scale-shaped white setae with sparse similarly shaped yellow setae interspersed in posterior area, setae fine, moderately long, directed forward in anterior area. Labrum with fine, long, abundant yellowish setae directed forward (partially whitish basally on area close to anteclypeus). Median groove partially visible from clypeus to prothoracic margin. Gulamentum glabrous except narrow anterior area with fine, short, moderately bristly white setae. Eyes with lobes small, diameter less than scape diameter at base; distance between upper eye lobes 1.65 times length of scape; in frontal view, distance between lower eye lobes 2.0 times length of scape. Antennae 0.7 times elytral length, surpassing basal quarter of elytra; scape noticeably narrow, with widest area slightly narrower than twice diameter of antennomere III; scape with short, decumbent, scale-shaped white setae dorsally, with abundant, similar yellow setae interspersed, together obscuring integument, setae, laterally and ventrally, similarly shaped, but mostly white with yellow setae interspersed; pedicel, antennomeres III–IV with short, decumbent, scale-shaped white setae (slightly more abundant dorsally), with sparse, similar yellow setae interspersed, together obscuring integument; antennomeres V–VIII dorsally with, abundant, decumbent white setae on most of basal 2/3, brownish on remaining surface (ventrally, sparsely interspersed with whitish setae on most of basal 2/3); antennomeres IX–XI with brownish pubescence obscuring most of integument, slightly interspersed with whitish setae dorsally. Antennal formula (ratio) based on length of antennomere III: scape = 0.54; pedicel = 0.22; IV = 0.54; V = 0.25; VI = 0.21; VII = 0.20; VIII = 0.16; IX = 0.16; X = 0.15; XI = 0.22.

Thorax. Prothorax slightly longer than wide. Pronotum coarsely, abundantly punctate; with short, decumbent, scale-shaped white setae, with similarly shaped, sparse yellow setae interspersed, obscuring wide lateral area of integument, with indistinct lateral band composed of short, decumbent, scale-shaped yellow setae, partially obscuring integument centrally, and short, decumbent, scale-shaped, yellow and

white setae between these two areas. Sides of prothorax with short, decumbent, scale-shaped, yellow and white setae. Prosternum with abundant, short, decumbent, white and yellow setae laterally, distinctly sparser centrally; prosternal process with abundant, short, decumbent white setae, irregularly interspersed with yellow setae basally. Mesoventrite with abundant short, decumbent, yellow setae, with white setae interspersed (setae gradually more scale-shaped toward mesoventral process); mesoventral process with abundant short, decumbent, moderately scale-shaped white setae, with similarly shaped yellow setae interspersed; mesanepisternum with abundant, short decumbent, scale-shaped, mostly white setae, fringed distally by mostly yellow setae. Mesepimeron, metanepisternum, and metaventrite with abundant, short, decumbent, scale-shaped both white and yellow setae (a little sparser on central area of metaventrite). Scutellum with short, sparse scale-shaped decumbent, yellow setae, denser, fringe-shaped on margins.

Elytra. Coarsely, abundantly punctate with dense white and yellow scale-shaped pubescence obscuring much of the surface, but not obscuring most of the punctures; basal two-thirds dominated by white pubescence with scattered or small patches of yellow pubescence intermixed, more noticeable adjacent to the suture; The dominant white pubescent area is bordered distally by an irregular lateral broad band of dominant darker brown, then more dominant dark yellow and then again dominant darker brown pubescence; the distal fourth of the elytra is densely covered in white pubescence with an irregular band of mostly dark brown pubescence near the apices.

Legs. Femora and tibiae with abundant dense, short, decumbent scale-shaped white setae, with sparse yellow setae interspersed, except distal third of protibiae with short blackish setae ventrally, and distal third of meso- and metatibiae with brownish setae ventrally. Tarsomeres I–II with abundant, short, decumbent, scale-shaped white setae, with similarly shaped sparse yellow setae interspersed; tarsomere III with fine, sparse, decumbent yellowish-brown setae; tarsomeres IV–V with sparse, decumbent brownish setae.

Abdomen. Ventrites I–II with dense, thick (somewhat scale-shaped), decumbent white setae with similar shaped yellow setae interspersed, with fringe of yellow setae on apex; ventrite III slightly, gradually depressed centrally toward apex, with setae as on II, but distinctly sparser in depressed area; ventrite IV gradually depressed toward apex centrally, with setae as on III, sparser on depressed area, and with fringe of long, erect dark-brown setae on each side of depressed area; ventrite V with setae as on IV (area with white scale-shaped setae narrower, and setae on depressed area sparser).

Dimensions (mm). Total length 7.70; prothoracic length 2.15; anterior prothoracic width 1.85; posterior prothoracic width 1.90; maximum prothoracic width 2.00; humeral width 2.40; elytral length 5.20.

Type material. Holotype female from MEXICO, *Quintana Roo*, 15–18 km N Tulum, 11–12 X.1982, J.E. Wappes col. (FSCA, previously in ACMT).

Remarks. *Morrisia pulchra* sp. nov. differs from *M. squamosa* (Fig. 55–59; see also photographs in Bezark 2019) as follows: body distinctly wider in female (Fig. 52); general pubescence in most areas white and denser; antennae not reaching abdomen; antennae mostly with darker pubescence only from antennomere IX to apex; eyes smaller (Fig. 60) with diameter of lobes smaller than the diameter of scape at base. In *M. squamosa*, the body of the female is slender, general pubescence is mostly yellow, especially on prothorax, antennae reach apex of the first abdominal segment, antennae dark pubescent from about middle of the antennomere IV to apex, and the eyes are larger with the lower lobe's diameter subequal in size to the base of the scape (Fig. 59).

Etymology. "Pulchra" Latin: beautiful, handsome, as is the appearance of this diminutive cerambycid.

Skillmania Santos-Silva, Nascimento and Wappes, gen. nov.

Etymology. Derived from "Skillman" (after Fred Skillman) and "ia". Named to honor and recognize Frederick W. Skillman, Pearce, AZ, good friend and outstanding collector of the Cerambycidae who has discovered many a new species simply by outworking his collecting partners. Feminine gender.

Type species. *Skillmania obrienorum* sp. nov., here designated.

Description. Male. Body moderate-sized, cylindrical. Head retractile; frons transverse; antennal tubercles flat, widely separated; eyes coarsely faceted, small, imperfectly divided (lacking ommatidia between lobes, but with dark, shining band connecting lobes); lower eye lobes much shorter than gena; antennae reaching about middle of elytra; scape short, slightly surpassing anterior margin of prothorax; antennomere III longer than scape; antennomere IV distinctly shorter than III, shorter than scape; remaining antennomeres distinctly shorter than IV; mandibles long (longer than length of frons), wide. Prothorax longer than wide; sides unarmed; in side view, pronotum gradually inclined toward posterior margin, especially at posterior quarter, not tuberculate. Procoxal cavities closed posteriorly; prosternal process distinctly, gradually widened toward apex. Metaventrite not distinctly reduced. Elytra without erect setae; parallel-sided; surface of posterior third moderately irregular; in side view, surface flat, until somewhat abruptly inclined to apex. Membranous wings present, well-developed. Legs short; femora subfusiform; mesotibiae very slightly sulcate dorsally on posterior quarter. Abdominal ventrite V coarsely, deeply, abundantly punctate.

Remarks. *Skillmania* gen. nov. by the dorsal sulcus of mesotibiae almost absent could be included in Pteropliini. However, this feature is also present in some species currently placed in *Adetus* (Apomecynini). When comparing the new genus with the type species of *Adetus* (*Polyopsia analis* Haldeman, 1847), the number of features separating those genera is considerable. However, when comparing it with some species assigned to *Adetus*, only the shape of the elytral apex remains reliable: somewhat abruptly inclined in *Skillmania,* gradually and uniformly inclined in *Adetus*.

Skillmania obrienorum **Santos-Silva, Nascimento and Wappes, sp. nov.**
(Fig. 61–66)

Description. Male. Integument mostly black; palpomeres reddish-brown, with yellowish-brown apex.

Head. Frons, vertex, and area behind eyes coarsely, abundantly punctate, gradually sparser toward margin of prothorax; frons with dense pale-yellow pubescence with light yellowish-brown pubescence interspersed, especially laterally; area between antennal tubercles and posterior margin of upper eye lobes with dense pale-yellow pubescence with light yellowish-brown pubescence interspersed, (the latter more abundant than in frons); area close to prothoracic margin with dense yellowish-brown pubescence; area behind eyes with pubescence as in area between upper eye lobes. Genae slightly longer than 1.5 times length of lower eye lobe; with dense yellowish-brown pubescence close to eye, gradually less dense, pale-yellow toward glabrous apex. Antennal tubercles mostly with dense light yellowish-brown pubescence. Postclypeus with abundant pale-yellow pubescence on wide central area close to frons, sparser close to anteclypeus, glabrous laterally. Labrum coplanar with anteclypeus at posterior third, inclined at anterior 2/3; nearly smooth on posterior third, finely rugose-punctate on inclined area; with sparse, long, erect brownish setae, especially laterally. Distance between upper eye lobes 1.08 times length of scape; in frontal view, distance between lower eye lobes 1.64 times length of scape. Antennae 0.83 times elytral length; scape with dense yellowish-brown pubescence dorsally, sparser laterally and ventrally; pedicel, basal 2/3 of antennomere III, narrow dorsal area of antennomere III, and base of antennomere IV with dense yellowish-brown pubescence, slightly sparser ventrally; remaining areas of antennomeres III and IV, and entire antennomeres V–XI with brownish pubescence partially obscuring integument, except a few short yellowish-brown setae at apex of some antennomeres; antennomeres III–X with long, erect dark setae ventrally, gradually sparser toward X. Antennal formula (ratio) based on length of antennomere III: scape = 0.70; pedicel = 0.27; IV = 0.61; V = 0.42; VI = 0.38; VII = 0.38; VIII = 0.35; IX = 0.34; X = 0.29; XI = 0.39.

Thorax. Prothorax nearly equal in width throughout; sides slightly rounded. Pronotum coarsely, abundantly punctate; sides of anterior third with light yellowish-brown pubescence obscuring integument, with white setae interspersed, except brownish pubescent narrow area close to anterior margin and in central area; central area of anterior third with yellowish-brown pubescence, slightly darker and sparser than laterally, with white setae interspersed; central third with white pubescence, denser laterally, sparser

centrally, with yellowish-brown pubescence interspersed, except large, brown pubescent irregular spot on each side of center; sides of posterior third with dense, yellowish-brown and white pubescence interspersed; central area of posterior third with yellowish-brown pubescence partially obscuring integument, except denser, yellower pubescence in center of this area. Sides of prothorax with dense yellowish-brown and white pubescence interspersed, except posterior area close to pronotum mostly white pubescent. Ventral surface of meso- and metathorax with yellowish-brown pubescence nearly obscuring integument (although sparser in central area of prosternum), with white setae interspersed in some areas, except abundant yellowish-white pubescence on mesoventral process, and narrow band along superior area of mesocoxal cavities (sides close to mesocoxal cavities glabrous). Metanepisternum and sides of metaventrite with yellowish-brown pubescence interspersed with white pubescence; wide central area of metaventrite with mostly yellowish-white pubescence with light yellowish-brown pubescence interspersed (slightly darker in some areas); anterior and posterior areas of metaventrite with yellowish-brown pubescence. Scutellum with dense pale-yellow pubescence.

Elytra. Coarsely, abundantly punctate. Pubescence as follows: sides of basal seventh with yellowish-brown pubescence partially obscuring integument, more pale-yellow at middle of area between humerus and scutellum, sparsely, completely interspersed with white setae (more abundant on inclined area), except in three irregular spots with sparse brownish pubescence, one dorsally, two in inclined area; area between apex of basal seventh and base of posterior third white pubescent, not obscuring integument, abundantly interspersed with yellow setae (white pubescence irregularly denser in some areas, forming spots), this area widely projected along suture to apex of scutellum, and posteriorly triangularly projected along suture toward posterior fifth; posterior third with large, inverted V-shaped pubescent band, with vertex of distinctly denser, pale yellow, and "arms" with slightly sparser yellowish-brown pubescence; area close to inverted V-shaped band with sparse brownish pubescence on inner and posterior side; posterior fifth with dense yellowish pubescence, irregularly interspersed with white pubescence anteriorly and posteriorly, except yellowish-brown pubescent close to apex, and two large, irregular spots with sparse brownish pubescence, one dorsally, another laterally.

Legs. Femora with abundant yellowish-brown pubescence (more yellowish depending on light intensity) with white pubescence interspersed (white pubescence gradually denser toward metafemora). Meso- and metatibiae ventrally transversely rugose; protibiae mostly with yellowish-brown pubescence partially obscuring integument dorsally and laterally, sparser and darkened ventrally; mesotibiae with mostly yellowish-brown pubescence with white pubescence interspersed dorsally and laterally, except darkened pubescence on dorsal sulcus, sparser and darkened ventrally; metatibiae with mostly yellowish-white pubescence on basal 2/3, yellowish-brown on dorsal and lateral sides of posterior third, sparser and darkened on ventral surface of posterior third. Tarsi with mostly sparse yellowish-brown pubescence dorsally.

Abdomen. Ventrites coarsely punctate (punctures gradually coarser and denser toward V); with yellowish-brown pubescence partially obscuring integument on I–IV, distinctly sparser on V.

Variation. Pronotal pubescence mostly grayish-yellow centrally and posteriorly; pubescence on sides of prothorax mostly grayish-yellow, slightly more yellowish-brown in some areas; posterior fifth of elytra with large, transverse white pubescent band not reaching apex except large, brownish pubescent dorsal spot (Fig. 66).

Dimensions (mm), holotype male/paratype male. Total length 10.30/11.15; prothoracic length 2.50/2.80; anterior prothoracic width 2.05/2.25; posterior prothoracic width 2.10/2.40; maximum prothoracic width 2.30/2.55; humeral width 2.60/2.95; elytral length 7.20/7.80.

Type material. Holotype male from MEXICO, *Jalisco*, UNAM (Estación de Biologia Chamela; 200′), 9.VIII.1982, C.W. and L. O'Brien and G. Wibmer col. (FSCA, previously in ACMT). Paratype male from MEXICO, *Oaxaca*: near Totolapan, 5.VIII.1965, Flint and Ortiz col. (ACMT).

Etymology. Named for the collectors of the holotype, Charlie and Lois O'Brien, notable insect collectors and taxonomists and close friends of Fred Skillman.

***Typophaula melancholica* Thomson, 1868**
(Fig. 67–71)

Typophaula melancholica Thomson 1868: 152; Lacordaire 1872: 604; Gemminger 1873: 3101 (cat.); Aurivillius 1922: 294 (cat.); Zikán and Zikán 1944: 26 (distr.); Blackwelder 1946: 598 (checklist); Breuning 1960: 177 (cat.); 1971: 269; Monné and Giesbert 1994: 190 (checklist); Monné 1994: 17 (cat.); 2005: 313 (cat.); Morvan and Morati 2006: 41 (distr.); Monné et al. 2010: 247 (distr.); Morvan and Roguet 2013: 21 (distr.); Dalens 2014: 28 (distr.); Monné 2018: 426 (cat.).

Typophaula dejeani Thomson 1868: 153; 1878: 11 (type) (nom. nov.).

Adetus tuberosus Galileo and Martins 2003: 476; Monné 2005: 285 (cat.); Monné and Hovore 2006: 224 (checklist); Monné et al. 2017: 58 (holotype); Monné 2018: 389 (cat.). **Syn. nov.**

Remarks. Examination of the holotype of *Adetus tuberosus*, and comparison with the original description of *Typophaula melancholica*, as well as photograph of the holotype of the latter, show that they are the same species. It is worth commenting that the tubercle of the prosternal process reported in the original description of *A. tuberosus* is also one of the most conspicuous features of *T. melancholica*. Also, worth mentioning, is that in the key by Breuning (1971) *Typophaula* is differentiated from *Adetus* at alternative of couplet 14 (1) as follows: "Saillie prosternale tronquée à son bord postérieur" (Translated: prosternal process truncated at posterior margin).

According to Monné (2018), *T. melancholica*, described from Brazil (without exact location) is currently known from French Guiana and Brazil (Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo). *Adetus tuberosus* was described based on a single specimen from Brazil (Alagoas). This latter record indicates that the species likely occurs in other Brazilian states along the east coast.

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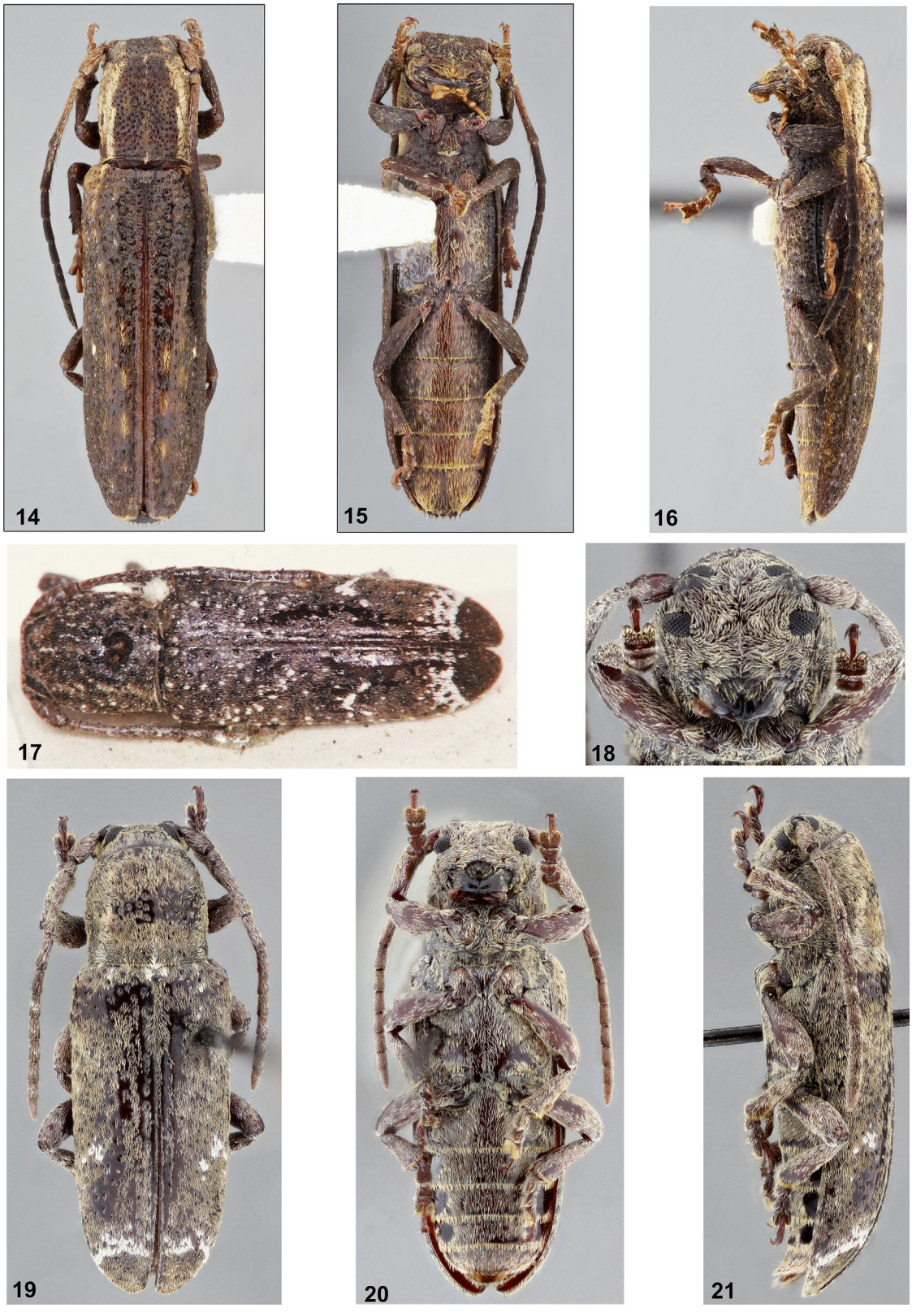
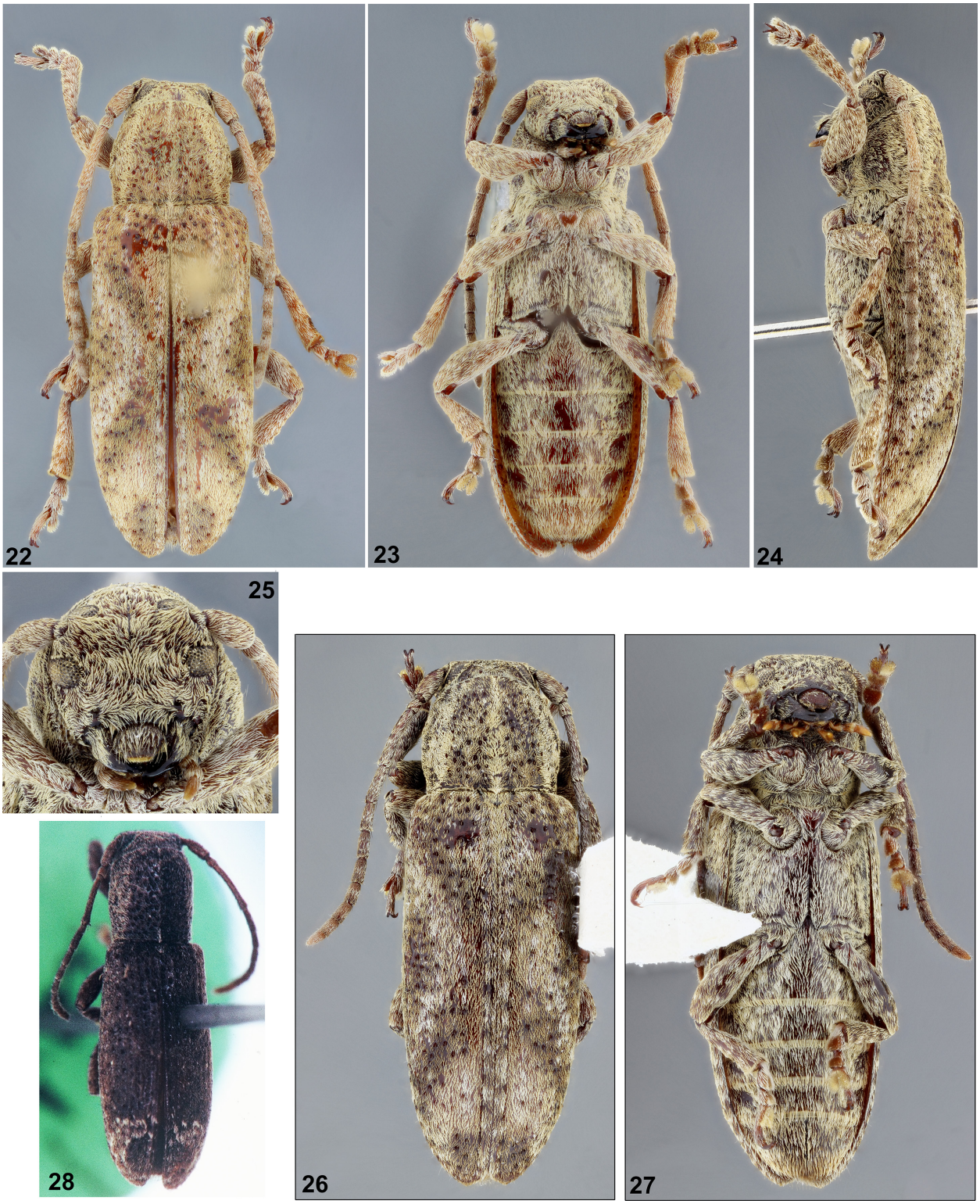
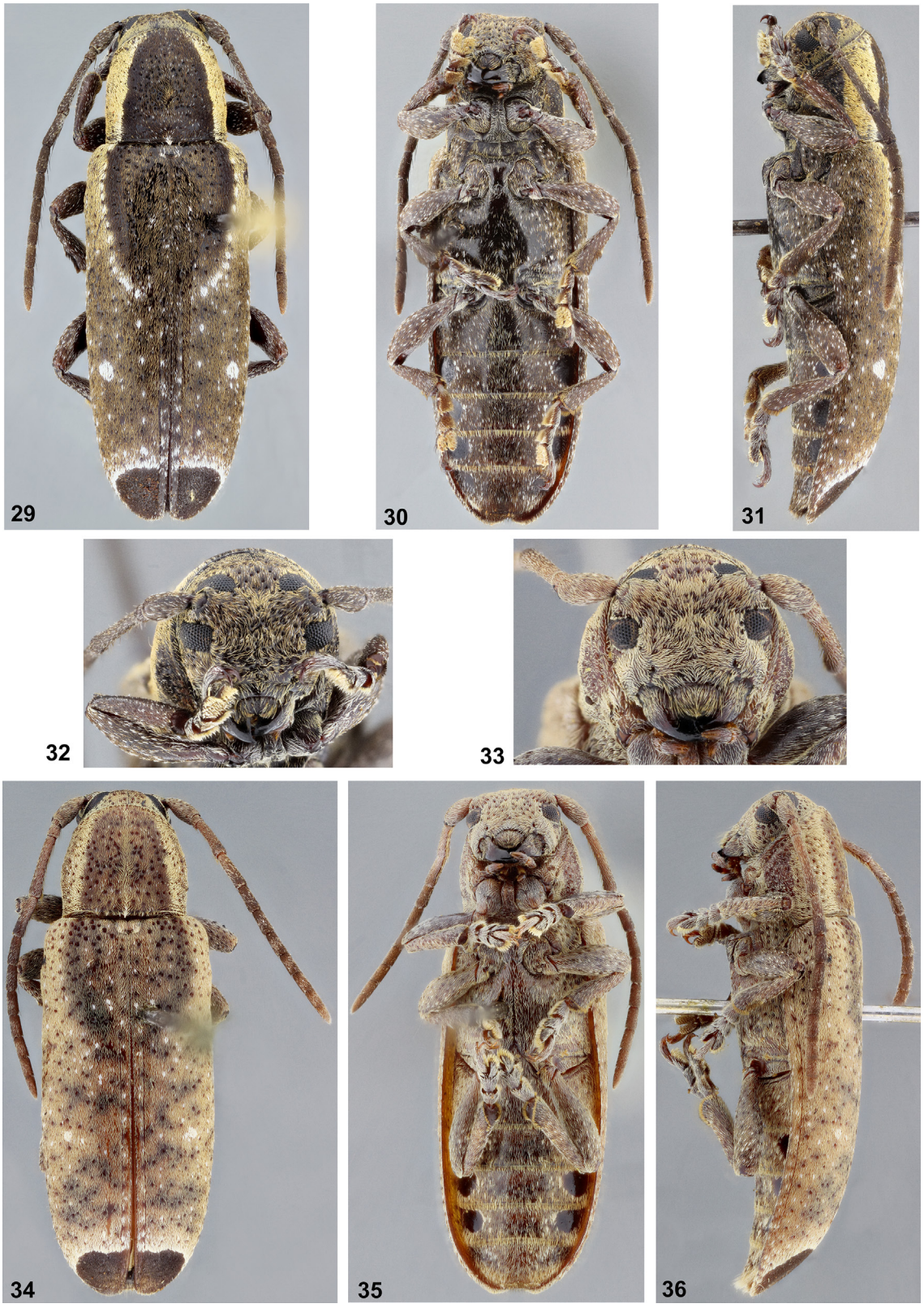
Figures 1–13. *Adetus* spp. **1)** *Adetus leucostigma*, lectotype, dorsal habitus. **2)** *A. venezuelensis*, holotype, dorsal habitus. **3)** *A. binotatus*, holotype, dorsal habitus. **4)** *A. binotatus*, male, dorsal habitus. **5)** *A. binotatus*, male, metatibiae. **6)** Specimen from USNM collection with type label of *A. venezuelensis*. **7)** *A. inaequalis*, holotype, oblique view. **8)** *A. cylindricus*, holotype, dorsal habitus. **9)** *A. punctatus*, holotype, dorsal habitus. **10)** *A. guttulatus*, syntype, dorsal habitus. **11)** *A. punctatus*, male, dorsal habitus. **12)** *A. punctatus*, male, metatibia. **13)** *A. punctatus*, female, metatibia.



Figures 14–21. *Adetus* spp. **14–16)** *Adetus bacillarius*, female: **14)** Dorsal habitus. **15)** Ventral habitus. **16)** Lateral habitus. **17–21)** *Adetus insularis*: **17)** Holotype, dorsal habitus. **18)** Head, frontal view, male. **19)** Dorsal habitus, male. **20)** Ventral habitus, male. **21)** Lateral habitus, male.

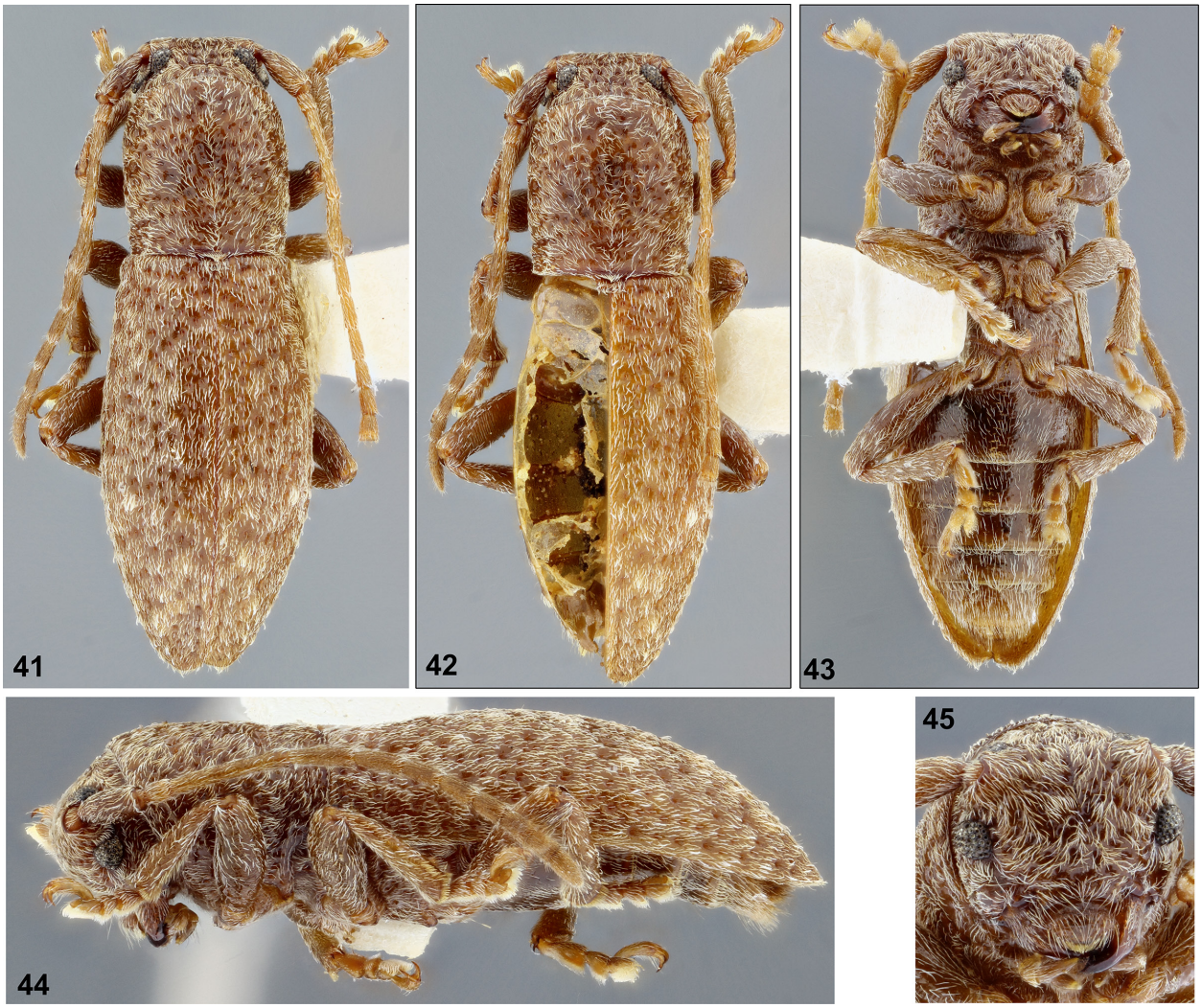


Figures 22–28. *Adetus* spp. **22–27)** *Adetus x-fasciatus* sp. nov.: **22)** Dorsal habitus, holotype male. **23)** Ventral habitus, holotype male. **24)** Lateral habitus, holotype male. **25)** Head, frontal view, holotype male. **26)** Dorsal habitus, paratype female. **27)** Ventral habitus, paratype female. **28)** *Adetus pusillus*, holotype, dorsal habitus.

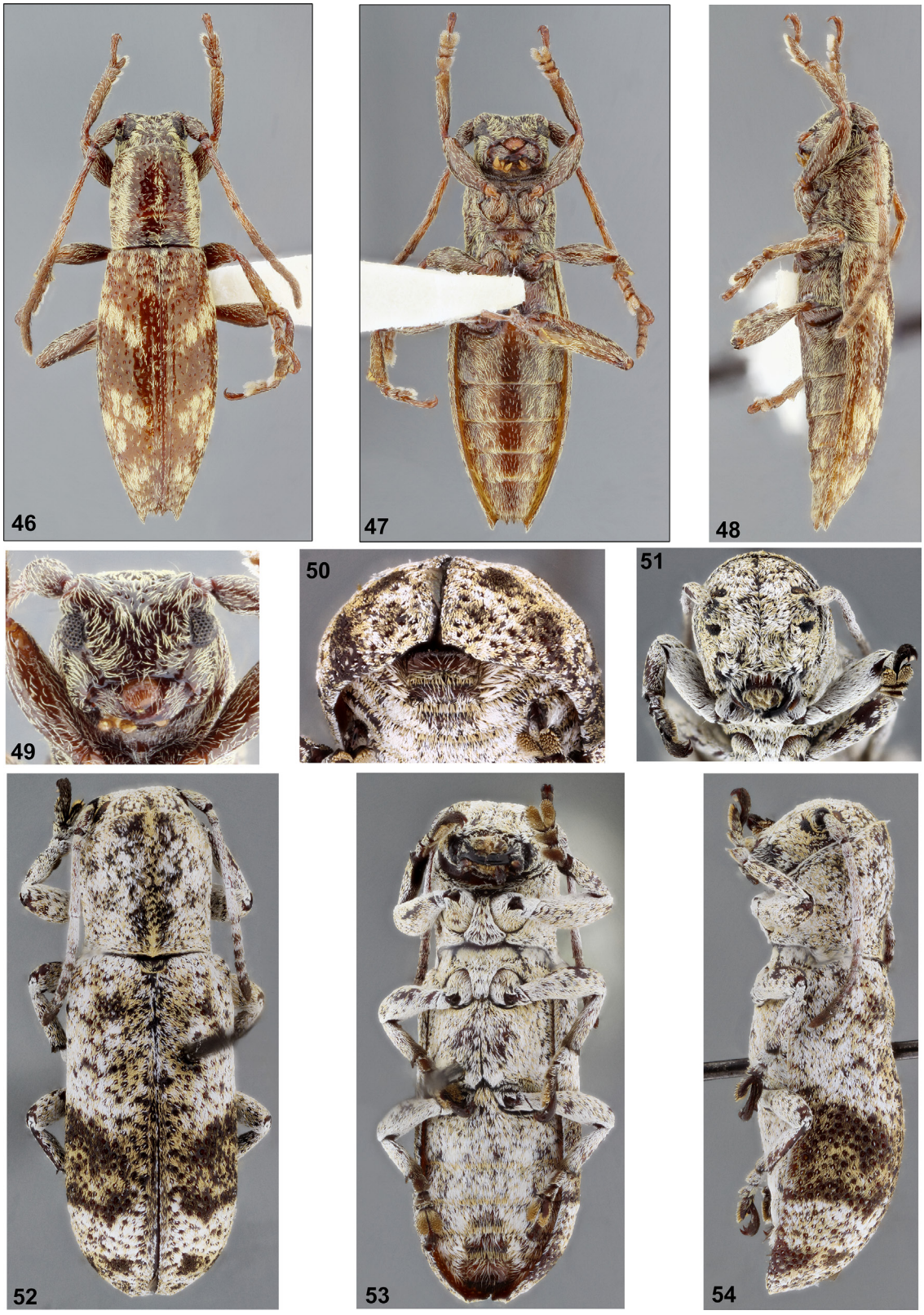


Figures 29–36. *Adetus* spp. **29–32)** *Adetus monteverdensis* sp. nov., holotype male: **29)** Dorsal habitus. **30)** Ventral habitus. **31)** Lateral habitus. **32)** Head frontal view. **33–36)** *Adetus analis*, male: **33)** Head, frontal view. **34)** Dorsal habitus. **35)** Ventral habitus. **36)** Lateral habitus.

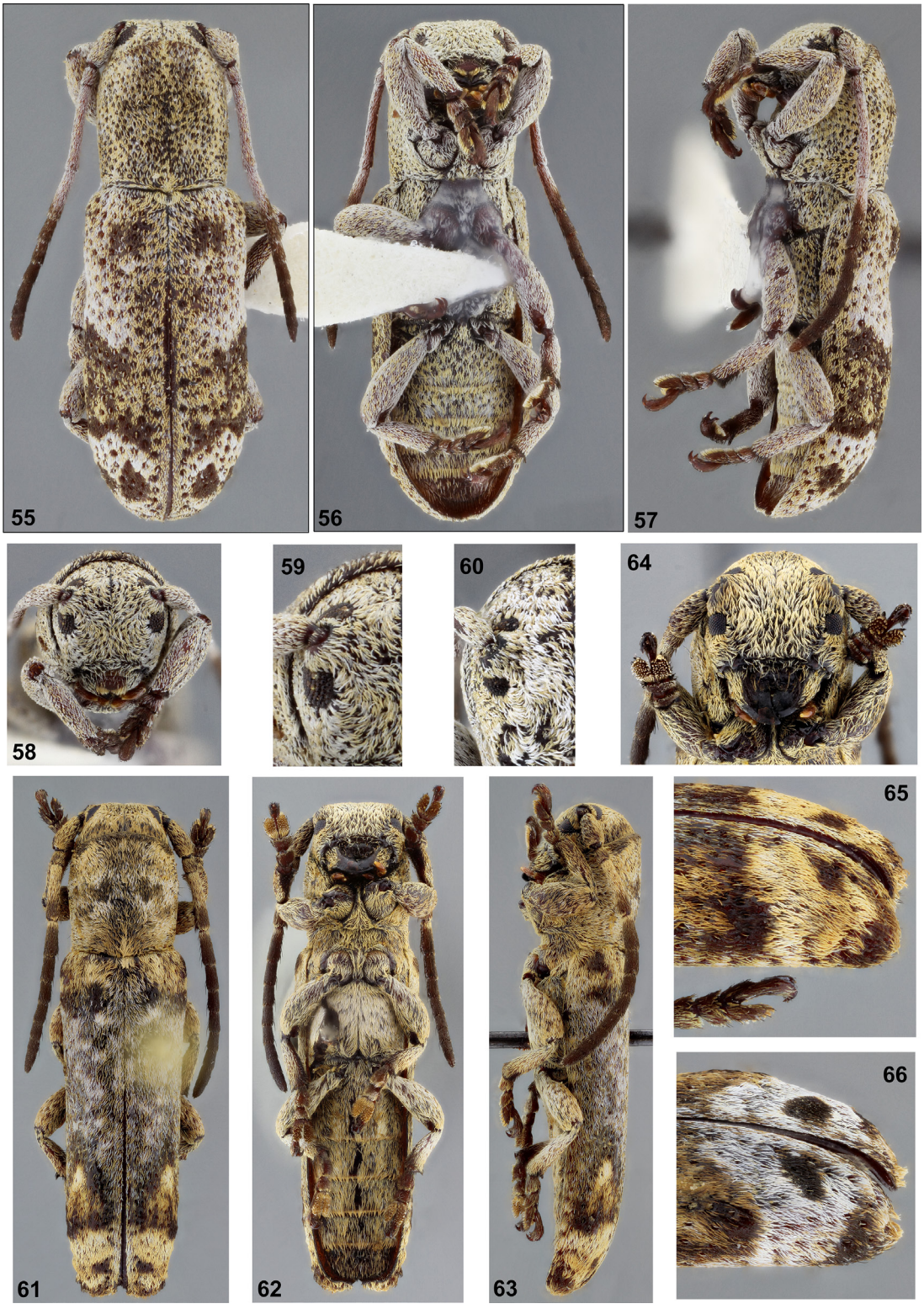
Figures 37–40. Apomecynini spp. **37–38)** *Adetus validus*, female: **37)** Dorsal habitus. **38)** Ventral habitus. **39–40)** *Adetaptera punctigera*, female: **39)** Dorsal habitus. **40)** Ventral habitus.



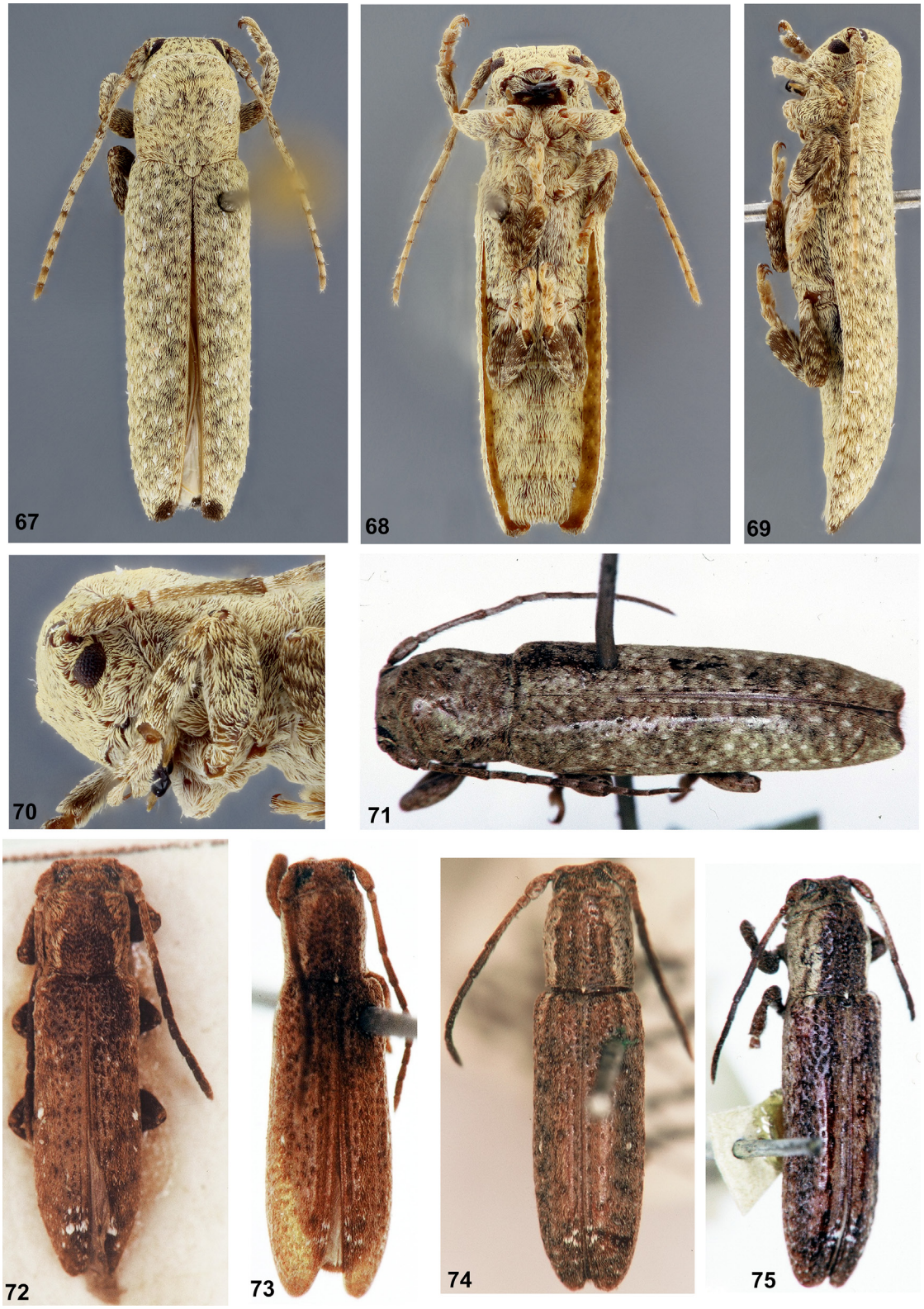
Figures 41–45. *Adetaptera albisetosa*, male. **41)** Dorsal habitus. **42)** Dorsal habitus, left elytra removed. **43)** Ventral habitus. **44)** Lateral habitus. **45)** Head, frontal view.



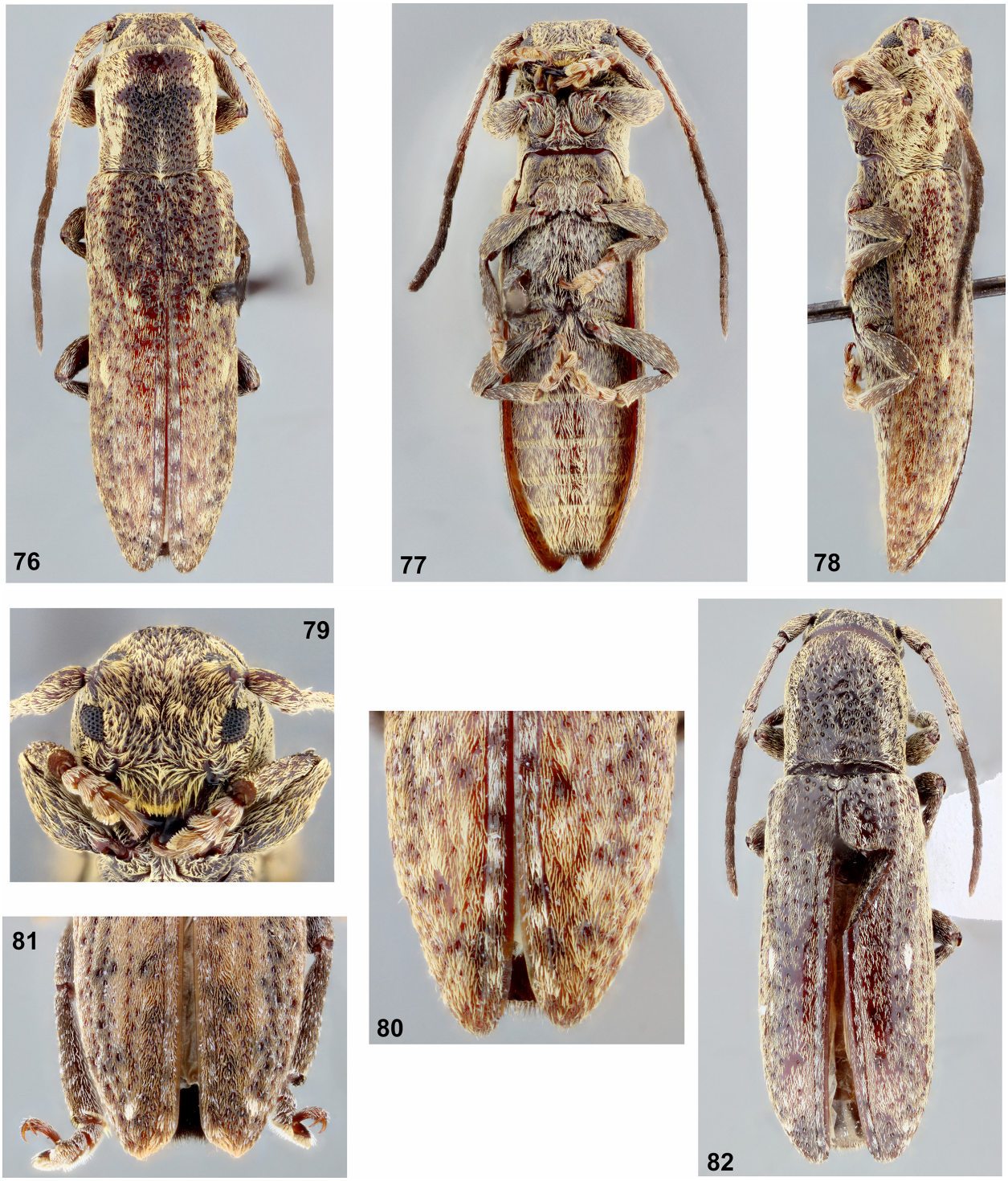
Figures 46–54. Apomecynini spp. **46–49)** *Adetaptera schaffneri* sp. nov., holotype male: **46)** Dorsal habitus. **47)** Ventral habitus. **48)** Lateral habitus. **49)** Head, frontal view. **50–54)** *Morissia pulchra* sp. nov., holotype female: **50)** Abdominal ventrite V. **51)** Head, frontal view. **52)** Dorsal habitus. **53)** Ventral habitus. **54)** Lateral habitus.



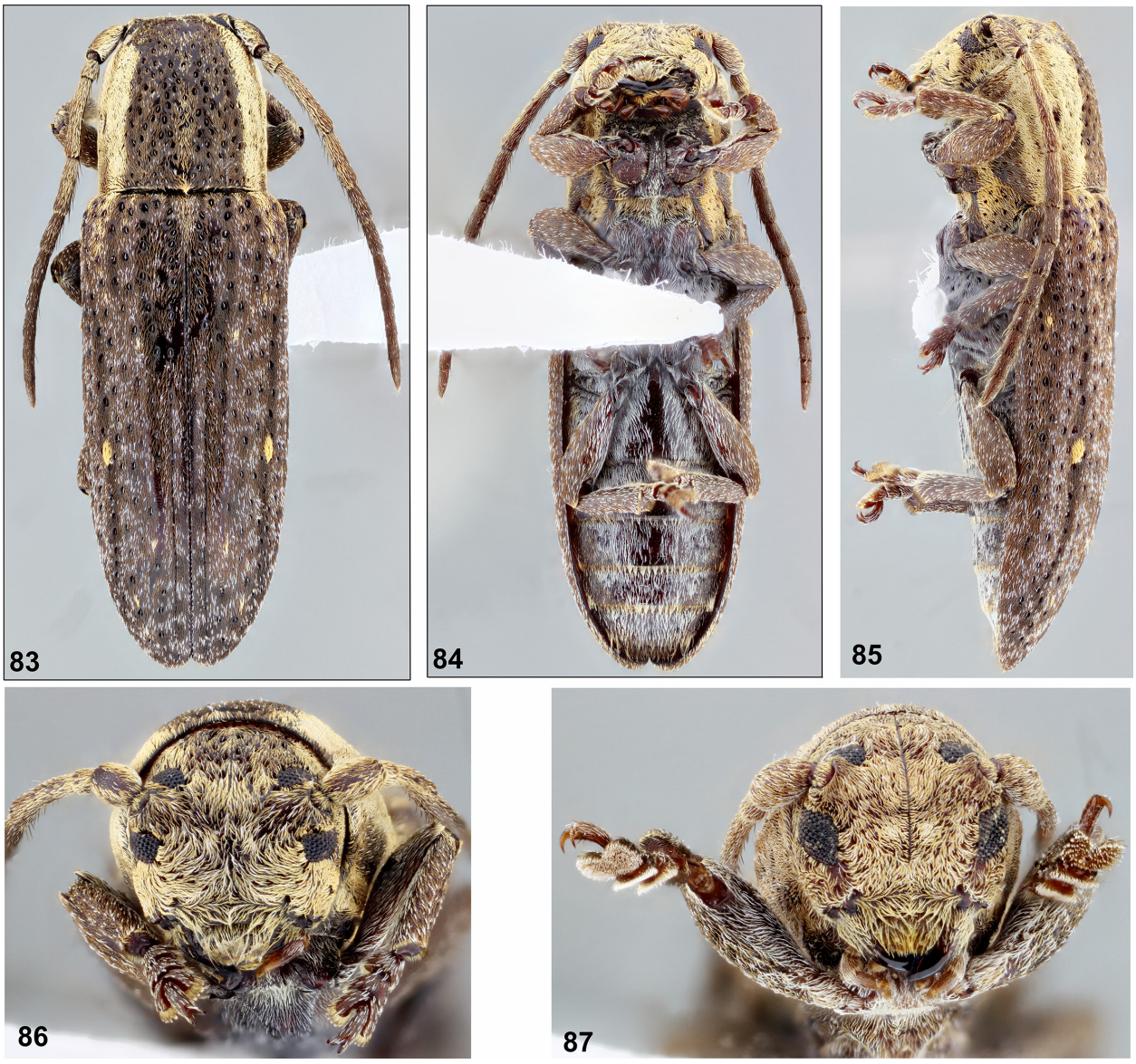
Figures 55–66. Apomecynini spp. **55–59)** *Morrisia squamosa* Chemsak and Noguera, comb. nov., male: **55)** Dorsal habitus. **56)** Ventral habitus. **57)** Lateral habitus. **58)** Head, frontal view. **59)** Eye. **60)** *Morrisia pulchra*, holotype female, eye. **61–66)** *Skillmania obrienorum* sp. nov.: **61)** Dorsal habitus, holotype male. **62)** Ventral habitus, holotype male. **63)** Lateral habitus, holotype male. **64)** Head, frontal view, holotype male. **65)** Elytral apex, holotype male. **66)** paratype male, elytral apex.



Figures 67–75. Apomecynini spp. **67–70)** *Adetus tuberosus*, holotype male: **67)** Dorsal habitus. **68)** Ventral habitus. **69)** Lateral habitus. **70)** Oblique view showing tubercle of prosternal process. **71)** *Typophaula melancholica*, holotype female. **72)** *Adetus latericius*, holotype, dorsal habitus. **73)** *Taloepora nana*, holotype, dorsal habitus. **74)** *Atimuropsis irregularis*, holotype, dorsal habitus. **75)** *Adetus gracilis*, syntype, dorsal habitus.



Figures 76–82. *Adetus* spp. **76–80)** *Adetus pseudobacillarius* sp. nov., holotype female: **76)** Dorsal habitus. **77)** Ventral habitus. **78)** Lateral habitus. **79)** Head, frontal view. **80)** Elytral apex. **81)** *Adetus bacillarius*, male, elytral apex. **82)** *Adetus tayronus*, paratype female, dorsal habitus.



Figures 83–87. *Adetus* spp. **83–86)** *Adetus clinei* sp. nov., holotype female: **83)** Dorsal habitus. **84)** Ventral habitus. **85)** Lateral habitus. **86)** Head, frontal view. **87)** *Adetus nanus*, male, head, frontal view.